Track Stick User Guide

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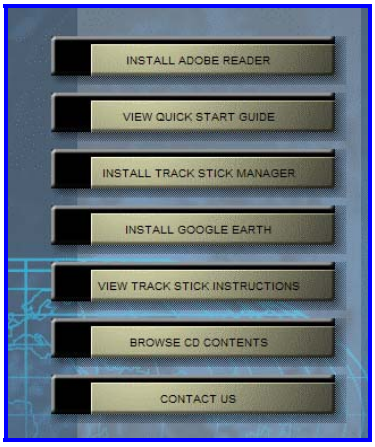
Track Stick Manager Installation Instructions

WARNING

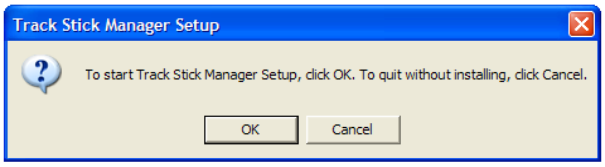
Be sure to install the software before plugging the Track Stick into your computer.

1. Insert the installation CD into the computer's disk drive. The program should start automatically.

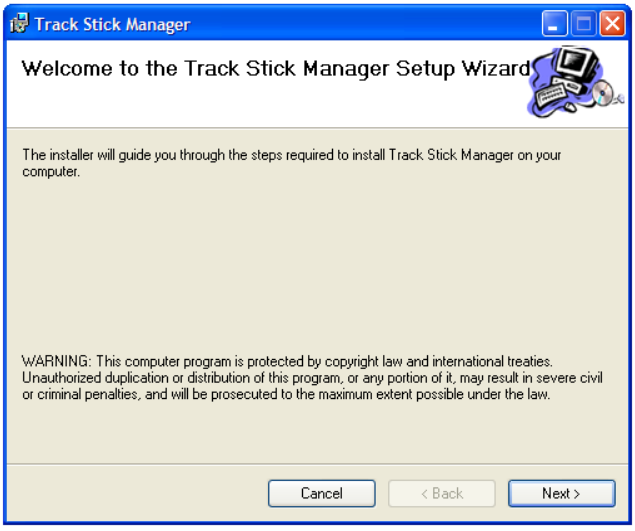


2. Click on the "Install Track Stick Manager"

3. Click "OK"

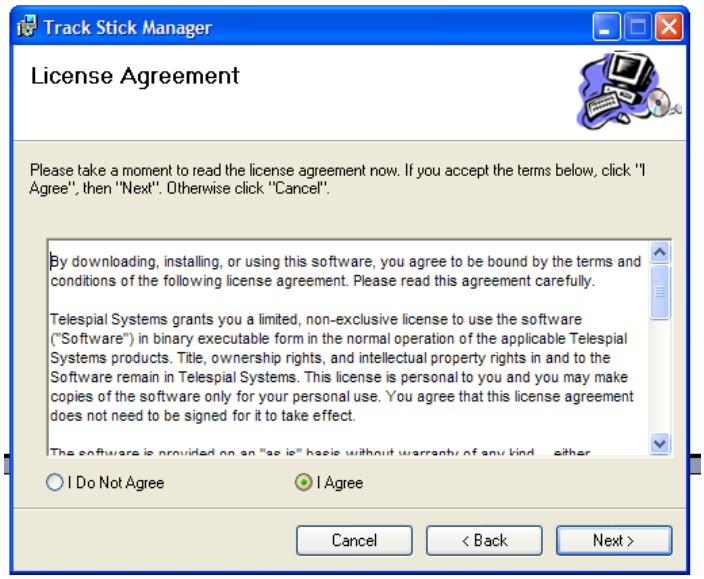


4. To start, click "Next"

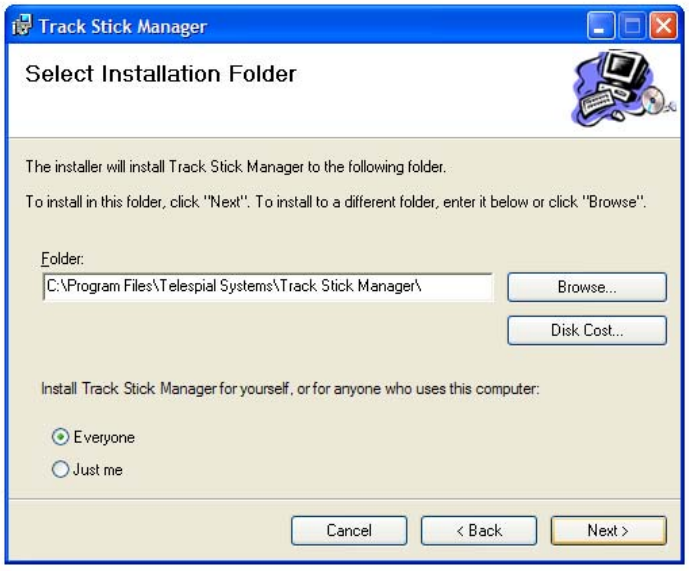


5. Read the Terms and Click “I Agree”

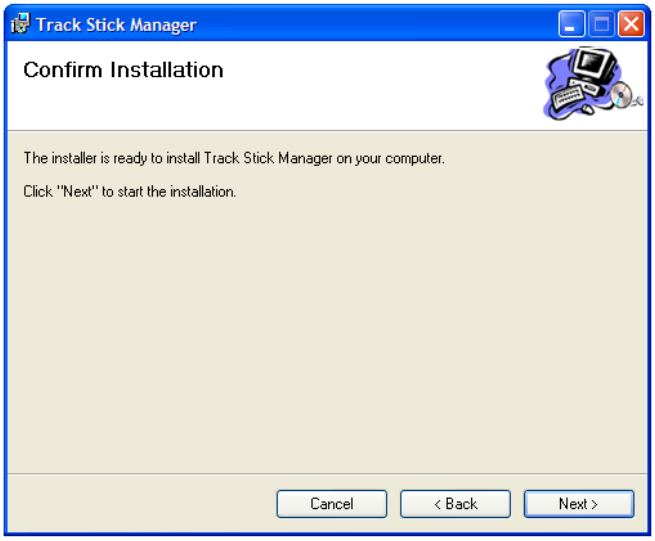
6. Click “Next”



7. Select where you want to save your Track Stick files.
8. Click ‘Next”

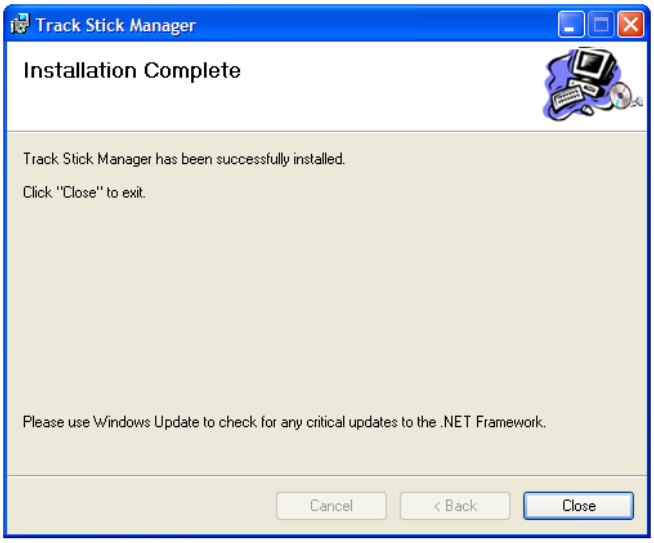


9. Click “Next”



10. Click “Close”

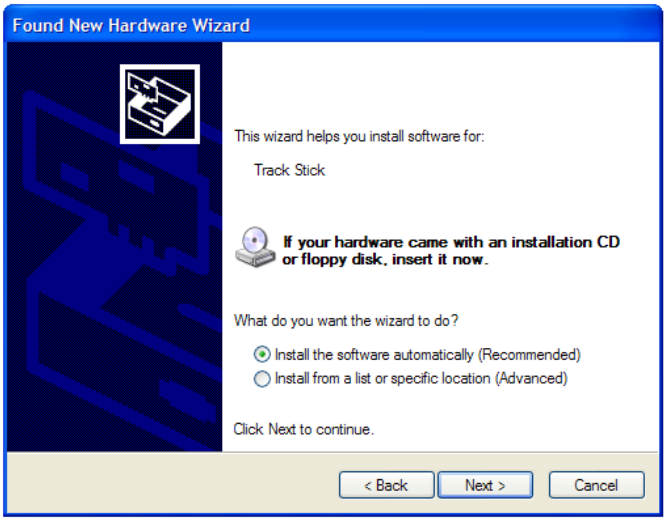
You have successfully completed the software Installation!



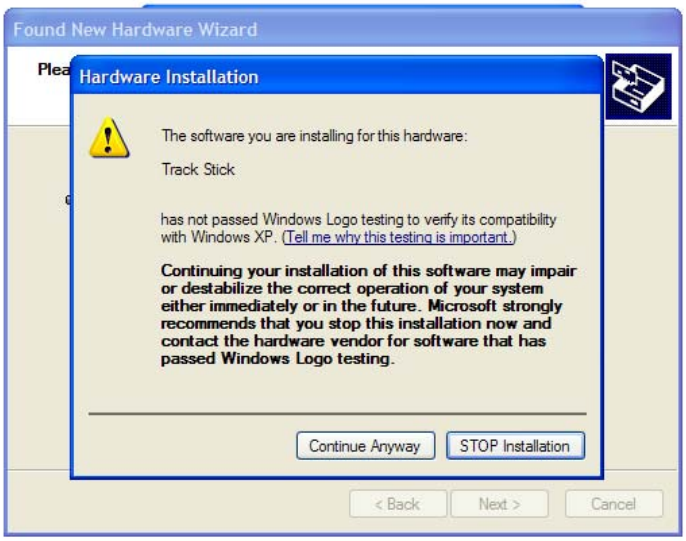
Once you have installed the Track Stick Manager Program, plug the Track Stick into the computer's USB port.

1. Select "No, not this time" and click "Next"

2. Select "Install Software Automatically" and click "Next"



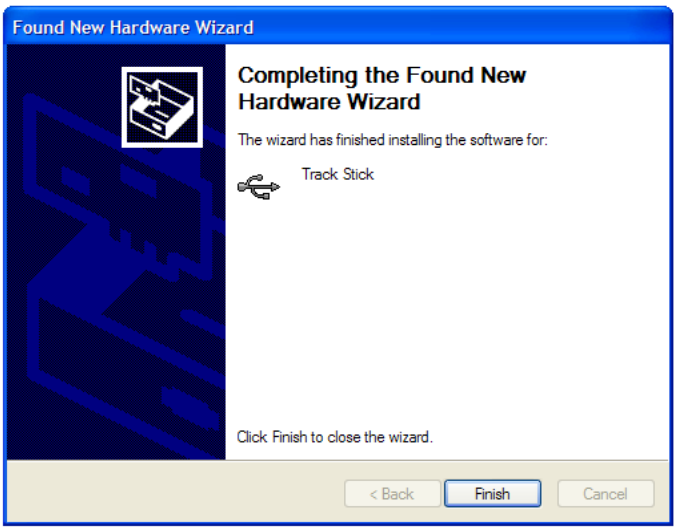
3. Click “Continue Anyway”



Please note: This screen now shows up on all newer Windows XP systems. The Track Stick Program will not harm your computer in any way. Microsoft is using this warning as a way to generate revenue from software manufacturers.

4. Click “Finish”

Congratulations, you are now ready to begin using the Track Stick



Quick Start Guide

1) Remove the USB cap and open the Track Stick by removing the small screw in the rear of the case. Install two new AAA batteries and close the case. Rechargeable NiMH batteries will last the longest.

2) Press the button on the side of the Track Stick so that the RED light flashes quickly.

3) The embossed globe on the Track Stick must face the sky without any metal objects block its view of the satellites. Leave the Track Stick outdoors with a clear view of the sky for at least fifteen minutes so that it can map its own position internally. The GREEN light should light after a few minutes and continue to blink every few seconds. If the GREEN light does not come on after a few minutes, move the Track Stick to a better location.

4) After at least fifteen minutes has past with the GREEN light blinking, place the Track Stick on your car's front dashboard with the embossed globe facing the sky. The car windshield should be on an angle and will not block the Track Stick's view of the sky. Making sure that the GREEN light keeps blinking, go for a drive.

5) **Be sure to install the software before plugging the Track Stick into your computer.**

6) **Once the Track Stick Manager and drivers have been installed onto your computer, plug the Track Stick into the computer USB port. The RED light should stay illuminated and not blink.**

7) **Open the Track Stick Manager program and press the globe: This will download all the recorded location histories.** 

Track Stick Modes

Mode 1 (Full Power): LED Rapidly blinks RED after the button is pressed. Once this mode is selected, the RED LED will blink about every second. With a clear view of the sky the GREEN LED will illuminate after a few minutes and continue to blink to indicate a satellite "lock" and that valid locations are being recorded.

Mode 2 (Low Power Mode): LED Rapidly blinks GREEN after the button is pressed. Once this mode is selected, the RED LED blinks once every sixteen (16) seconds and then the Track Stick goes back to sleep to greatly extend the battery life. If the Track Stick does not have a clear view of the sky or is indoors, its computer will attempt to communicate with the satellites for three seconds before returning back to sleep.

Mode 3 (Turn Power Off): RED LED and GREEN LED blink rapidly. This will turn the power off to the Track Stick and save battery life. No location histories can be recorded.

PLEASE NOTE:

Without the GREEN LED illuminated, accurate locations will not be recorded. Always position the Track Stick with the batteries facing towards the sky. There is a small image of a globe imprinted into the Track Stick case to indicate that this side must face up, towards the sky. Be sure that nothing metallic is blocking the Track Stick's view of the sky.

Track Stick Introduction

The Track Stick contains the latest GPS technology and is capable of recording locations accurately to within a few feet. To ensure proper operation the following guidelines should be followed to achieve the best results when using this device.

1. The Track Stick always requires an unobstructed view of the sky to receive satellite signals. Never place the Track Stick in a vehicle's trunk or in any other object made of metal. Clothing, handbags, backpacks, most automobile windshields, fiberglass and other non-metallic objects will not normally interfere with the Track Stick's operation.

2. When installing new batteries, always leave the Track Stick in full power mode for at least fifteen (15) minutes with a clear view of the sky. The GREEN LED should illuminate after about three (3) minutes if a good satellite signal is available. If the GREEN LED does not illuminate after a few minutes, move the Track Stick to another location to receive a better satellite signal and wait an additional fifteen (15) minutes.

3. Battery life will vary with normal operation. In full power mode, twenty four hours of recorded location histories is typical using NiMh rechargeable batteries. When in low power mode, five (5) days of operation can be achieved if a strong satellite signal is always available during the entire time of operation.

DO NOT LEAVE THE TRACK STICK IN FULL POWER MODE WHEN INDOORS AND NOT BEING USED TO TRACK SOMEONE. BE SURE TO TURN OFF THE POWER OR REMOVE THE BATTERIES. THE BATTERIES WILL ONLY LAST SIXTEEN (16) HOURS WHEN THE TRACK STICK IS KEPT INDOORS.

Getting Started

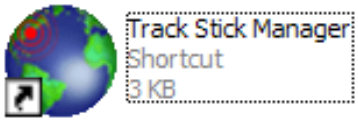
Remove the cap on the USB plug and the screw on the back of the Track Stick to open the case and install two fresh AAA batteries. Rechargeable NiMh will give the best results and longest operation.

The GREEN LED should light for a few seconds and the RED LED will then begin to blink continuously. If not, press the button on the side of the Track Stick until the RED LED blinks rapidly. After the power has been turned on, proceed to the next step.

1. **Once the software has been installed, plug the Track Stick into your computer's USB port.**

WARNING

Be sure to install the software before plugging the Track Stick into your computer.

2. **Click** 

3. **Select "Tools", "Device Properties". The following screen is displayed.**

Device ID

Click “Change” and enter a name for your Track Stick up to 20 characters in length.

Memory

The percentage of memory used. Click “Erase All” to clear the Track Stick’s memory. Removing the batteries will not erase any of the Track Stick memory.

Power

This shows the current status of the batteries.

Power Modes

The unique power management features of the Track Stick allow for long battery life and covert operation. Understanding how each mode operates is vital to proper use of the Track Stick.

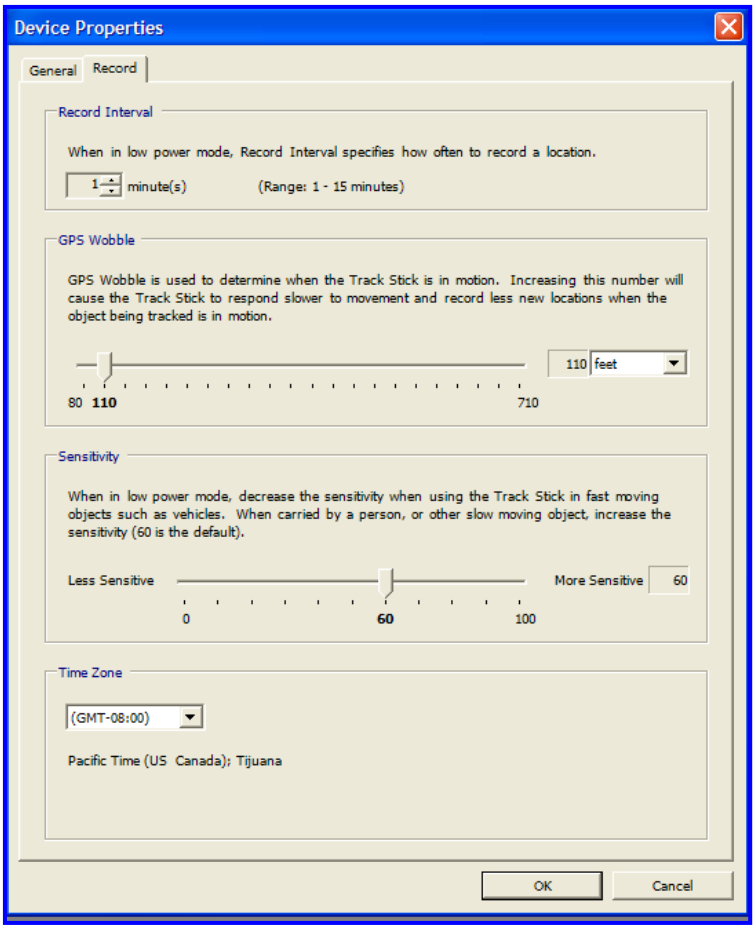
One of three modes is selected by pressing the button located on the side of the Track Stick.

Mode 1 (Full Power): LED Rapidly blinks RED after the button is pressed. Once this mode is selected, the RED LED will blink about every second. With a clear view of the sky the GREEN LED will also illuminate after a few minutes to indicate a satellite “lock” and that valid locations are being recorded.

PLEASE NOTE:
Without the GREEN LED illuminated, accurate locations will not be recorded. Always position the Track Stick with the batteries facing towards the sky. There is a small image of a globe imprinted into the Track Stick case to indicate that this side must face up, towards the sky. Be sure that nothing metallic is blocking the Track Stick’s view of the sky.

Mode 2 (Low Power Mode): LED Rapidly blinks GREEN after the button is pressed. Once this mode is selected, the RED LED blinks once every sixteen (16) seconds and then the Track Stick goes back to sleep to greatly extend the battery life. If the Track Stick does not have a clear view of the sky or is indoors, its computer will attempt to communicate with the satellites for three seconds before returning back to sleep.

Under the "Device Properties" Menu, Select "Record" for low power mode options.



Record Interval

This setting is adjustable from one (1) to fifteen (15) minutes. This setting does not affect battery life, it only acts as a way to conserve memory or minimize unnecessary data.

GPS Wobble

The Track Stick senses motion by comparing its current location to its last known location. If the Track Stick has moved greater then the selected boundary, a new location history will be recorded. Increasing this radius will cause less location histories to be recorded while the Track Stick is in motion. The default radius of 110 feet (34 meters) has been factory tested to give the best results and the least amount of "wobble" locations when the Track Stick is not in motion.

GPS Wobble refers to location drift that is recorded by all GPS receivers as the satellites move across the sky. The Track Stick incorporates proprietary algorithms that can virtually eliminate this common phenomenon.

Sensitivity

In order to save power, the Track Stick's sensitivity can be adjusted. Increasing this setting will cause a "machine gun" effect of recorded locations around the Track Stick when it is not moving. Increase the sensitivity to more accurately record the location histories of slow moving objects such as children but also increase memory usage and mapped locations in the same area.

Please Note: When recording the location histories of people, it is recommended that the Track Stick be kept in the **Full Power** mode for the best results. The low power mode should only be used when the Track Stick can not be retrieved for a long period of time.

Time Zone

Select your local time zone in reference to Greenwich Mean Time.

Mode 3 (Low Power Mode or Turn Power Off): LED Rapidly blinks ORANGE (RED / GREEN) after the button is pressed. Depending on the selected option, the Track Stick will remain in Mode 2 without the LEDs illuminating for covert operation or the device will simply be powered down to stop recording location histories and save battery life.

PLEASE NOTE:

Be sure to remove the batteries from the Track Stick when it is not in use. The Track Stick's satellite receiver requires a small amount of power to keep its clock and other vital systems running. Leaving the batteries in will drain them after a few weeks even with the power turned off.

Recording Location Histories with Track Stick

Once you have installed the software on your computer and setup all the options, it is time to begin recording your location.

Press the button on the side of Track Stick until the RED LED blinks rapidly. Place the Track Stick on a table outside with a clear view of the sky for at least fifteen (15) minutes. During this time the GREEN LED should start blinking every few seconds.

Place the Track Stick on the front dash board of your car with the Globe impression (antenna and batteries) facing up towards the sky. The GREEN LED should blink the entire time. If the GREEN LED goes out, simply relocate the Track Stick to another spot in the vehicle so that the GREEN LED turns on again.

Begin driving and going about your normal day to record a detailed history of where you have been.

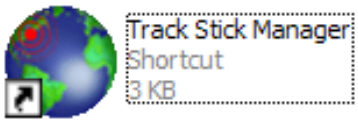
You have just recorded your first location histories with Track Stick

Downloading Recorded Track Stick Data

1. **Once the software has been installed, plug the Track Stick into your computer's USB port.**

WARNING

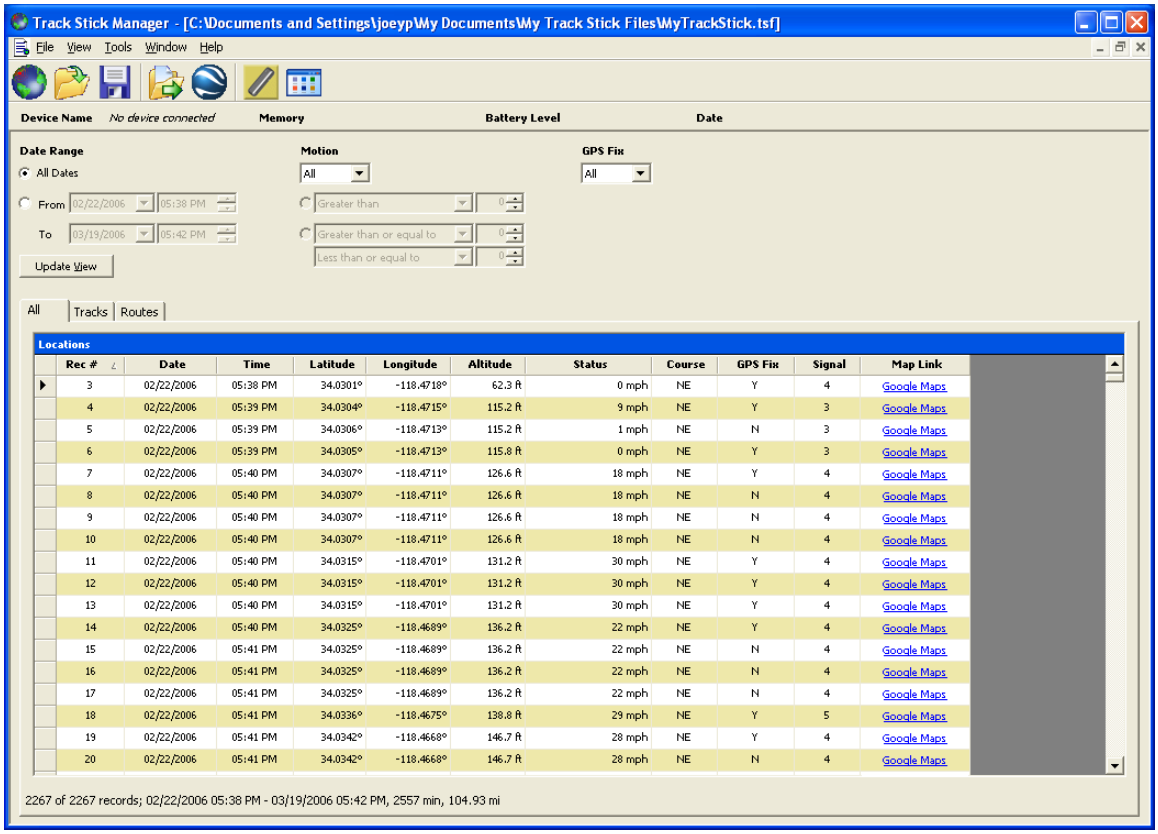
Be sure to install the software before plugging the Track Stick into your computer.

2. **Click** 

3. **Select "File", "Download Track Stick Data"**

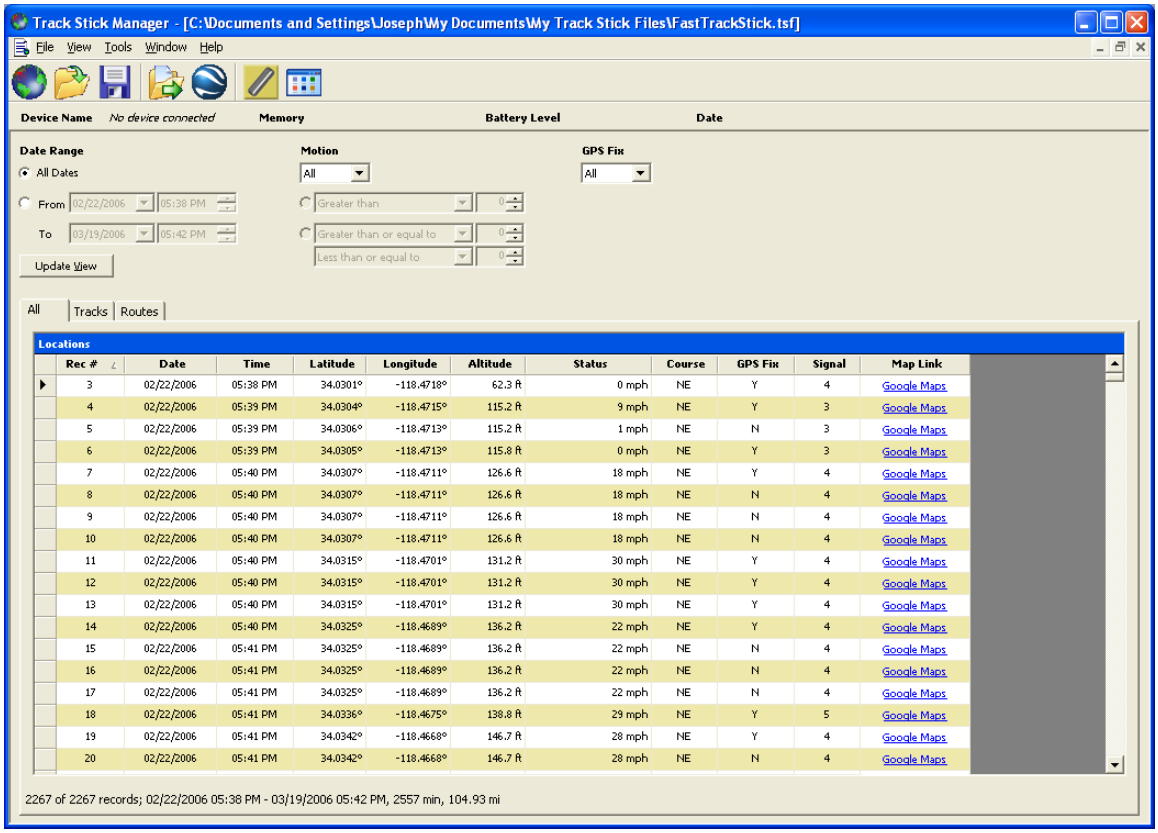
You will be prompted for a name to save the file in the Track Stick folder.

The recorded Track Stick data will appear similar to the example shown here



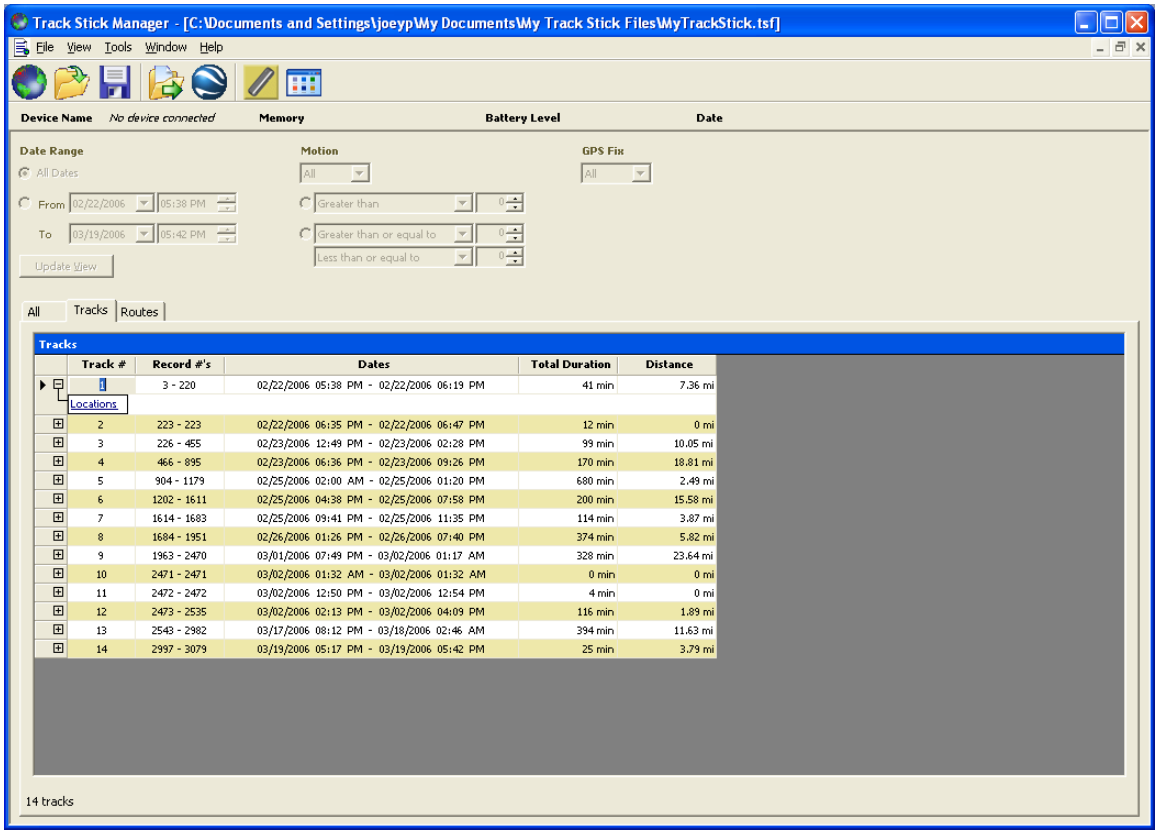
Recorded information is presented in three different ways (All, Tracks, Routes):

All



All recorded locations are displayed together in the grid.

Tracks

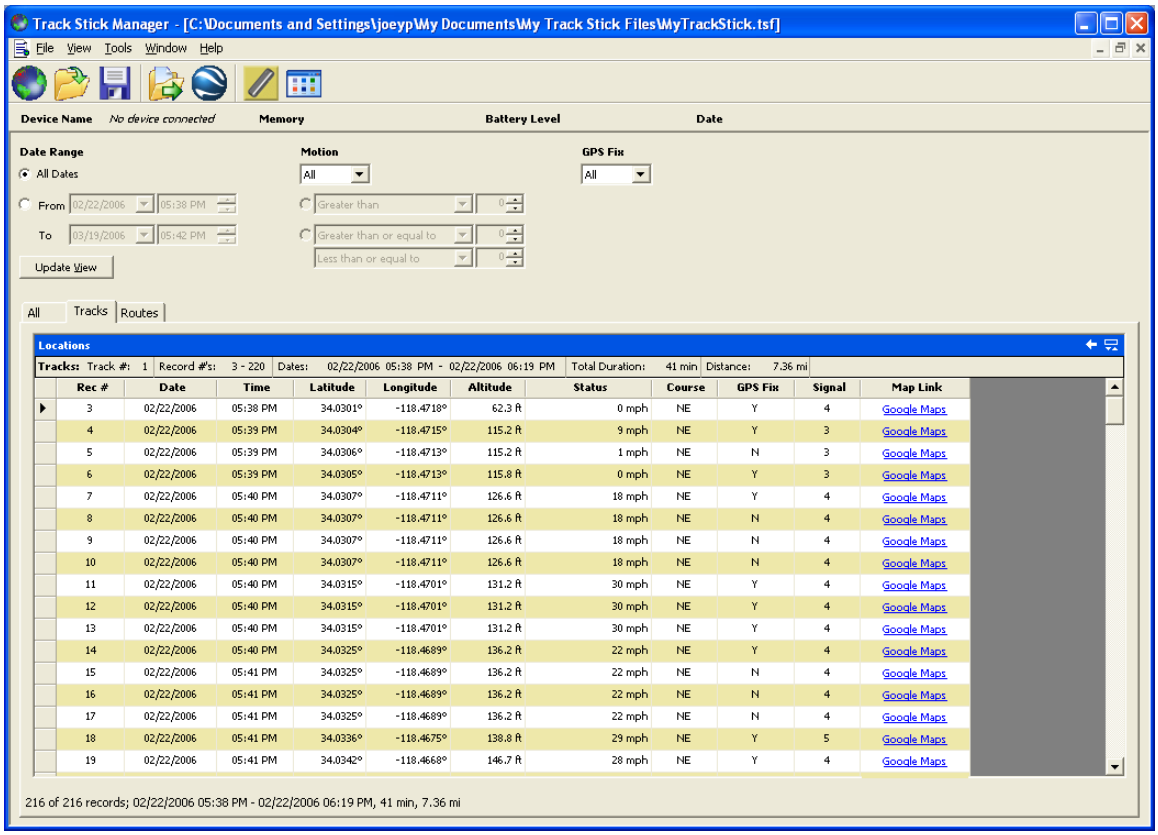


Recorded locations are grouped into tracks. A track is a path of records logged in a continuous recording session (between when the Track Stick was turned on and then off).

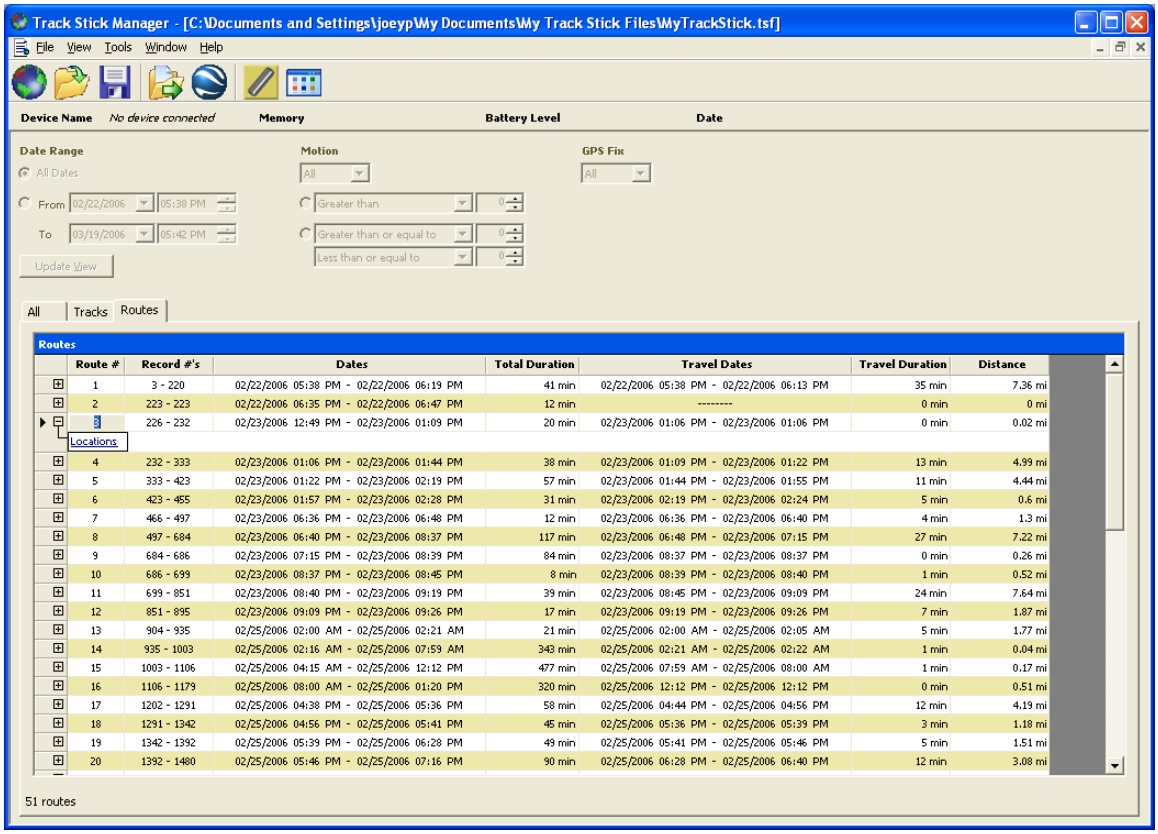
Distance is calculated by measuring the distance between each successive location in a track. The more frequent the recording interval, the more accurate the distance measurement is. Altitude is excluded from the calculation.

You can view all locations in a track by expanding a track row and clicking on the link as shown above.

After viewing locations, you can return to the tracks view by clicking the back arrow in the upper-right corner of the grid as shown below.



Routes



Recorded locations are grouped into routes. A route is a path between stops in the same track. The end points of this path are stopped longer than the amount of time specified in the Routes section of software options (default is one minute).

Again, as for tracks, distance is calculated by measuring the distance between each successive location in a route.

Travel Dates and Travel Duration describe the dates and amount of time the Track Stick was moving. Dates and Total Duration contains the same information, only it also includes the end points of a route.

Route locations can be viewed in a similar fashion to track locations. Just click the link after expanding a route row.

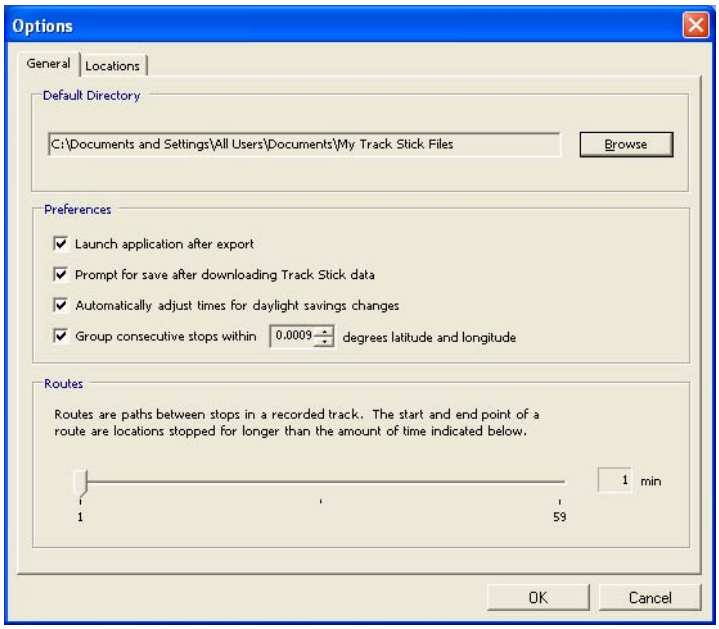
Filtering

By choosing the different filtering options, you can view the records that are most important to you. As an example, if you are only interested in the locations you visited and not the route you took to get there, use the "motion" filter to select places that you stopped for more than a few minutes. Once you have selected your filtering options, be sure to click "update view". The actual saved data is not modified in any way and can be retrieved by selecting "all data" and updating the view.

There is a filter status bar at the below the grid that summarizes the results of a filter. This includes the number of records found, dates covered, total duration, and cumulative distance (across tracks) of the filtered records.

Besides the obvious recorded information, each item can be individually mapped by clicking on the map link to the right of the records.

4. Select "Tools", "Options"



General Tab

Default Directory

The directory to save raw Track Stick files.

Preferences

Launch application after export – Check to automatically run Google Earth, Internet Explorer and other data specific applications.

Prompt for save after downloading Track Stick data – Check to automatically save data.

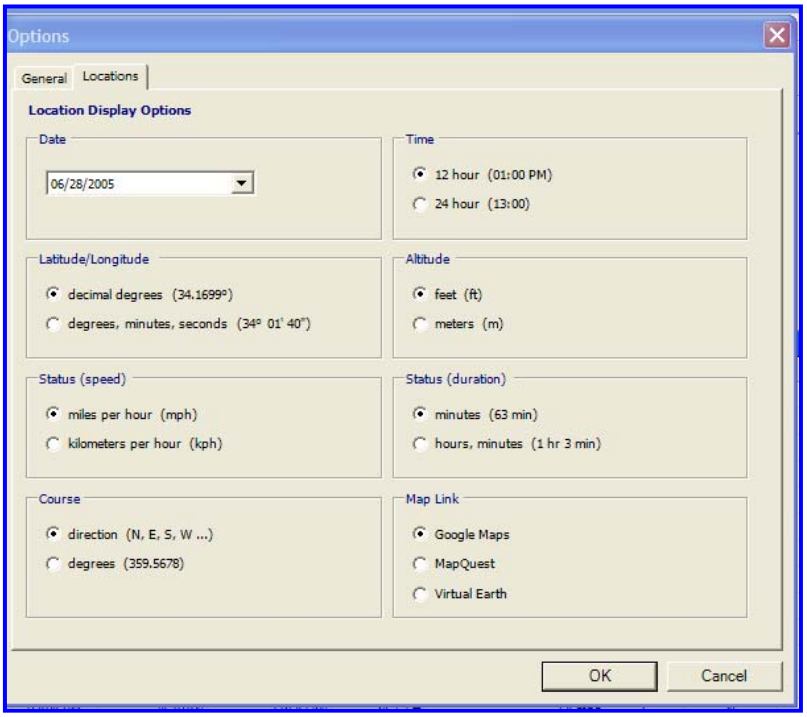
Adjust for daylight savings time – Check to automatically adjust daylight savings time.

Group consecutive stops – Groups consecutive recorded stops that are within a specified number of degrees latitude/longitude of each other into a single stop.

Routes

Routes are paths between stops in a recorded track. The start and endpoint of a route are locations stopped for longer than the amount of time indicated here.

Locations Tab



Select the preferred formats for each recorded history item.

Map Link

Select your preferred mapping website

www.maps.google.com

www.MapQuest.com

www.VirtualEarth.com

Exporting and Mapping Your Recorded Histories

One of the most unique features of the Track Stick is its ability to export to Internet based mapping programs. For the best results, a high speed Internet connection is recommended.

Computer System Requirements

Minimum configuration for detailed mapping:

- Windows 2000 or newer
- Intel® Pentium® PIII 500 MHz
- 128MB RAM
- 200MB hard-disk space
- 3D-capable video card with 16MB VRAM
- 1024x768, 32-bit (true color) screen
- USB1.1 Port

Exporting to Google Earth.

Warning:
Be sure to download the free software at Earth.Google.com before proceeding.

1. **Open your favorite Track Stick file (.tsf) be selecting "File", "Open".**

2. **Select your preferred information using the filtering options and by hitting "update view". Only the locations shown will be exported.**

3. **Select "File", "Export"**

4. **Pick a name to save the new file.**

5. **Select either "Google Earth Pushpins" or "Google Earth Fly-Through"**

   Pushpins – Good for showing each location visited (stopped) by the Track Stick or object being tracked.

   Fly-Through – Used when showing the traveled routes and locations visited.

6. **If you selected "automatically launch" under options, Google Earth should open and each location will be shown on a detailed 3D map.**

7. **Be sure to click on "Route" under the "Places" heading on the left side of Google Earth. Once selected, hit "Play" (Green arrow under places) and the map will "fly" over the same path that the Track Stick recorded.**

Refer to Google Earth's website for more instructions on using this program.

Exporting to HTML

Another unique feature of the Track Stick is in its ability to show detailed maps of all recorded history without installing any special software. By exporting to .html, the location histories can be viewed on any computer with Internet Explorer and an Internet connection.

1. **Open your favorite Track Stick file (.tsf) be selecting "File", "Open".**

2. **Select you preferred information using the filtering options and by hitting "update view". Only the locations shown will be exported.**

3. **Select "File", "Export"**

4. **Pick a name to save the new file.**

5. **The file will be exported and saved in the "My Track Stick" folder. In addition a folder with the same name that you chose will be created which contains all the necessary data to view in Internet Explorer. Double Click on the chosen_name.html file to start the mapping software.**

Click on any location on the list for a detailed map of that recorded location. Double click on the location to bring up satellite images and additional maps.

If the map does not show, be sure to hit the "Active X" alert message and allow the content to be shown.

Emailing HTML files

Be sure to "zip" the entire folder and all its contents before emailing these files. A free .zip program is available at www.winzip.com.

Rich Text (.rtf)

The Rich Text format is a quick and easy way to integrate recorded location histories into Microsoft Word and other document programs.

Record 402

Date: 11/02/2005 10:43 AM

Latitude: 34.9039 Longitude: -116.8870

Status: Stopped 12 min

Course: N Altitude: 1976.0 ft

GPS Fix: Y Signal: 8

Map Link: http://maps.google.com/maps?q=34.9039+-116.887&h=en&t=h

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Record 492

Date: 11/02/2005 12:32 PM

Latitude: 34.0683 Longitude: -117.8476

Status: Stopped 5 min

Course: W Altitude: 839.2 ft

GPS Fix: Y Signal: 7

Map Link: http://maps.google.com/maps?q=34.0683+-117.8476&h=en&t=h

Comma-Separated Values (.csv)

When exporting Track Stick files to other mapping programs, they must first be converted to the comma-separated values (.csv) file format. Once they are converted, refer to the specific programs instructions for importing these files into that specific third party program.

Please visit www.TrackStick.com for up to date information regarding new products and your Track Stick personal GPS location recorder.

Track Stick Troubleshooting Guide

Problem: Track Stick manager runs but is unable to see the Track Stick when connected.

Or

Problem: Hardware wizard say “Unable to install drivers for this device”

Solution #1: Make sure two fresh AAA batteries are installed and the Track Stick’s Red light is on when connected to the USB.

Solution #2: Wrong drivers were installed by Windows because the Track Stick was plugged in BEFORE software was installed.

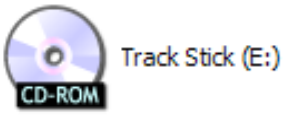
WARNING

Be sure to install the software before plugging the Track Stick into your computer.

The most common mistake made by customers is not reading the warning above. If they plug the Track Stick into a computer without the software installed, Windows will install the wrong drivers for the Track Stick. This is a common problem with most USB devices on the market.

1. Do not plug the Track Stick into the computer
2. Go to control panel, Add/Remove programs.
3. Remove Track Stick Manager
4. Remove Track Stick Drivers
5. Double Click "Setup.exe" on the Track Stick disk or you can get the software off of www.trackstick.com/download.html
6. Insert the installation CD into the computer’s disk drive. If the CD does not start automatically, follow the next few steps.

7. Select “My Computer” from the “Start” menu.

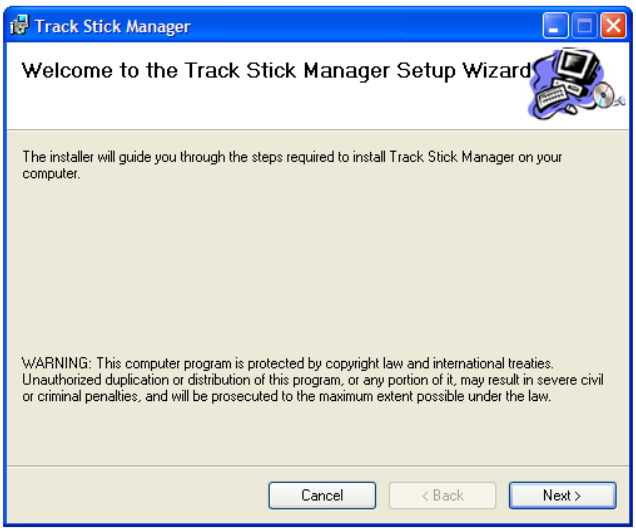
8. Double click on the “Track Stick” CD 

9. Double click on 

10. Double click on 

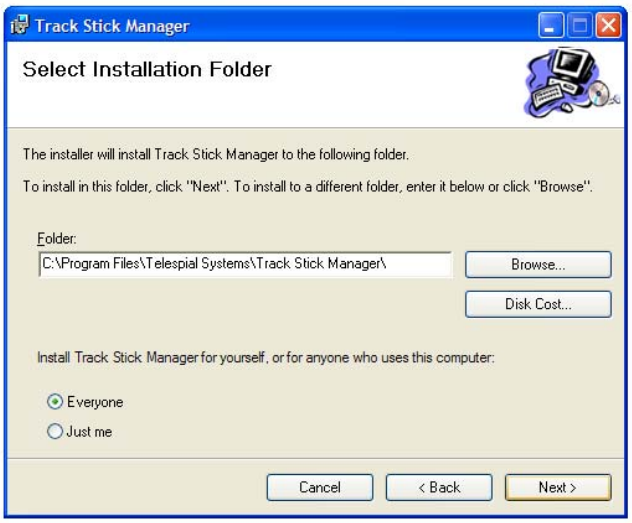
11. Click “OK” 

12. Click “Next”

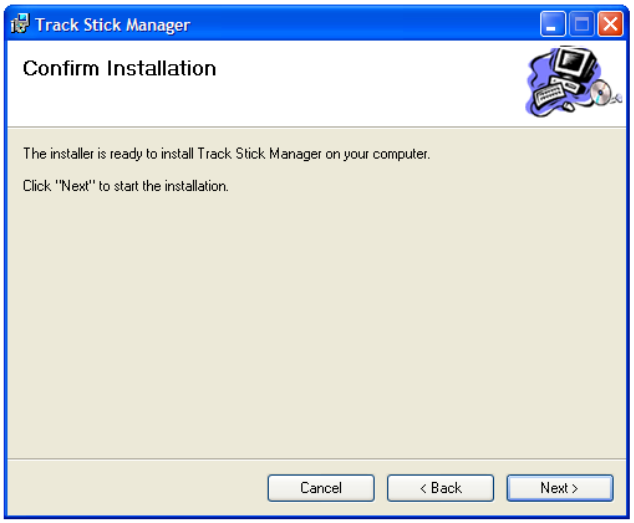
13. Click 

‘Next”

Additionally you can change the folder to save the Track Stick Manager under.

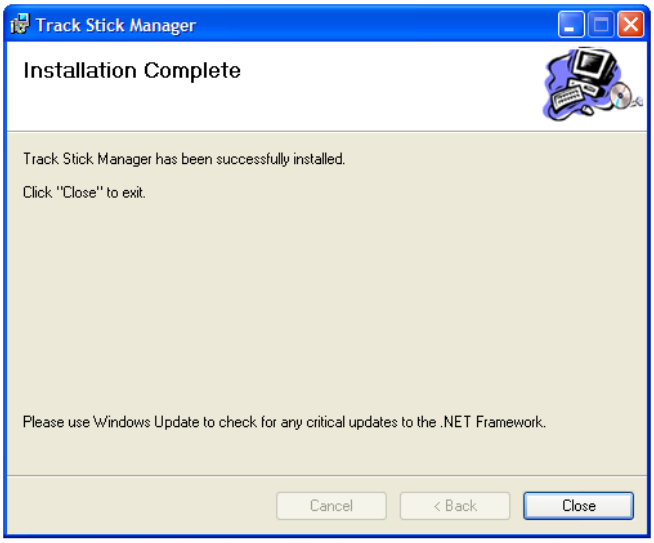


14. Click “Next”



15. Click “Close”

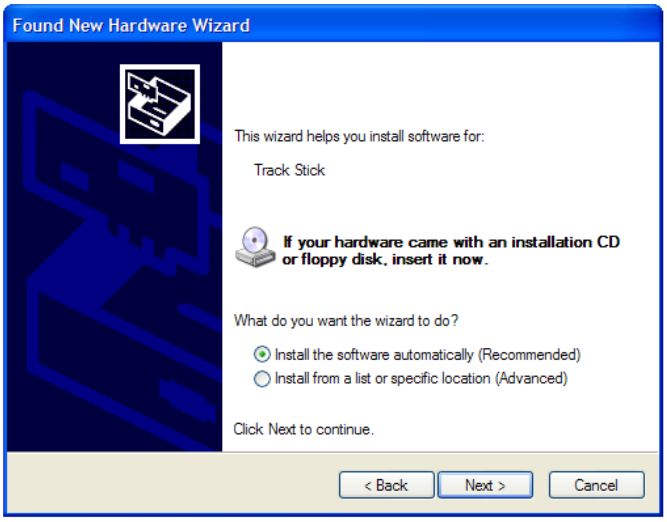
You have successfully completed the software Installation!



Once you have installed the Track Stick Manager Program, plug the Track Stick into the computer's USB port.

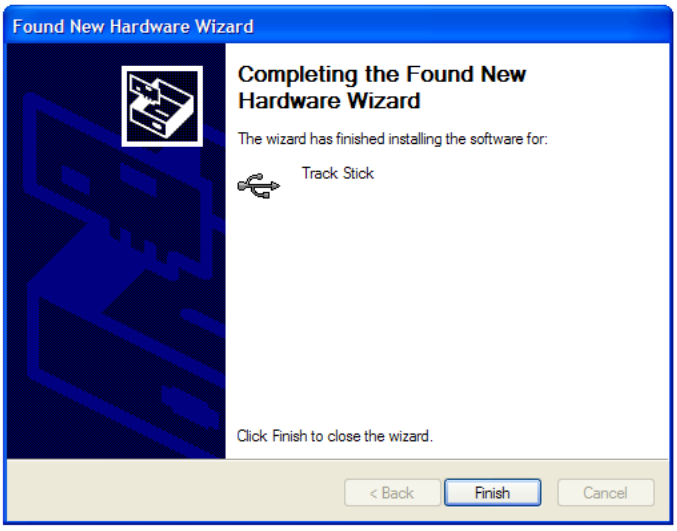
5. Select "No, not this time" and click "Next"

6. Select “Install Software Automatically” and click “Next”



7. Click “Continue Anyway”

8. Click “Finish”



Problem: When the Track Stick is plugged into the USB port, the Track Stick manager gives the following message:

Unable to load DLL C:\windows\system32\kernel32.dll)

Solution #3: Follow solution #2 and be sure to only run "setup.exe" on the install disk or you can get the software off of www.trackstick.com/download.html

Problem: No errors show and everything appears to work OK but the Track Stick is not being seen by the Track Stick Manager.

Solution #4: If all other solutions fail:

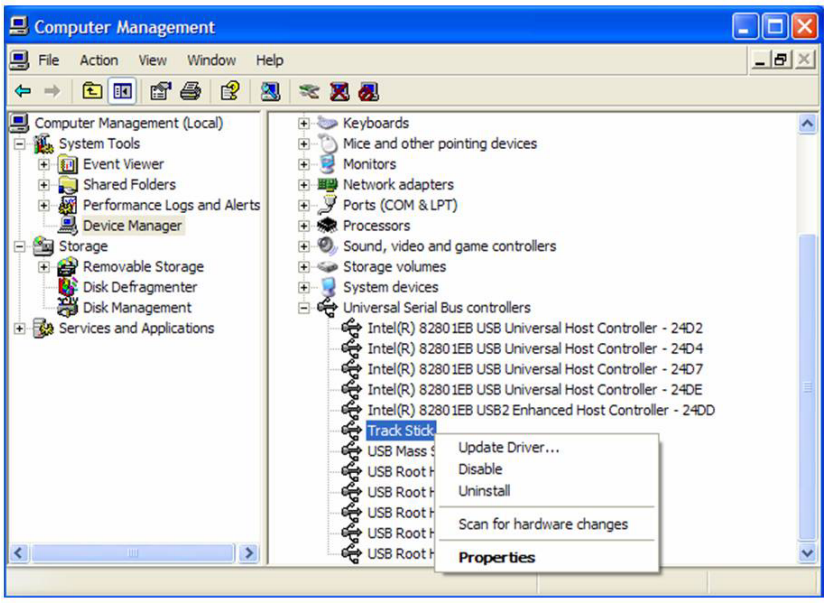
Turn on the Track Stick and plug it into the computer's USB port.

1. Right Click on 

2. Left click "Manage"

3. Select “Device Manager”

4. Find Track Stick in the list and right click and select “uninstall”



5. Once the Track Stick drivers are uninstalled, close the device manager, remove the Track Stick from the USB port and then plug it back into the USB port again with the power turned on. The “New Hardware Found” wizard should pop up and you can continue on from page 4 of this document to reinstall the Track Stick drivers.