



**Trackmate Racing**  
**Slot Car Lap Counter**  
**SCLUSB**  
**V9.60**

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## **Introduction**

Trackmate Lap counter is an easy to use lap counter that works with any scale slot car track and supports up to 8 lanes. Laps are timed within accuracy of 1/1000 of a second. Trackmate hardware supports all kinds of sensors, infrared, reed switches, dead strips and also guide flag U-sensors. It can also control track power.

## **System Requirements**

PC must run Microsoft Windows. It must have a USB port which all Windows computers have. Software will run on Windows XP, ME, Vista, Windows 7, Windows 8, Windows 10 and will work fine on Laptops, Netbooks, Desktop computers. CD drive not required.

Software will NOT run on Chromebooks, Apple products or Android tablets.

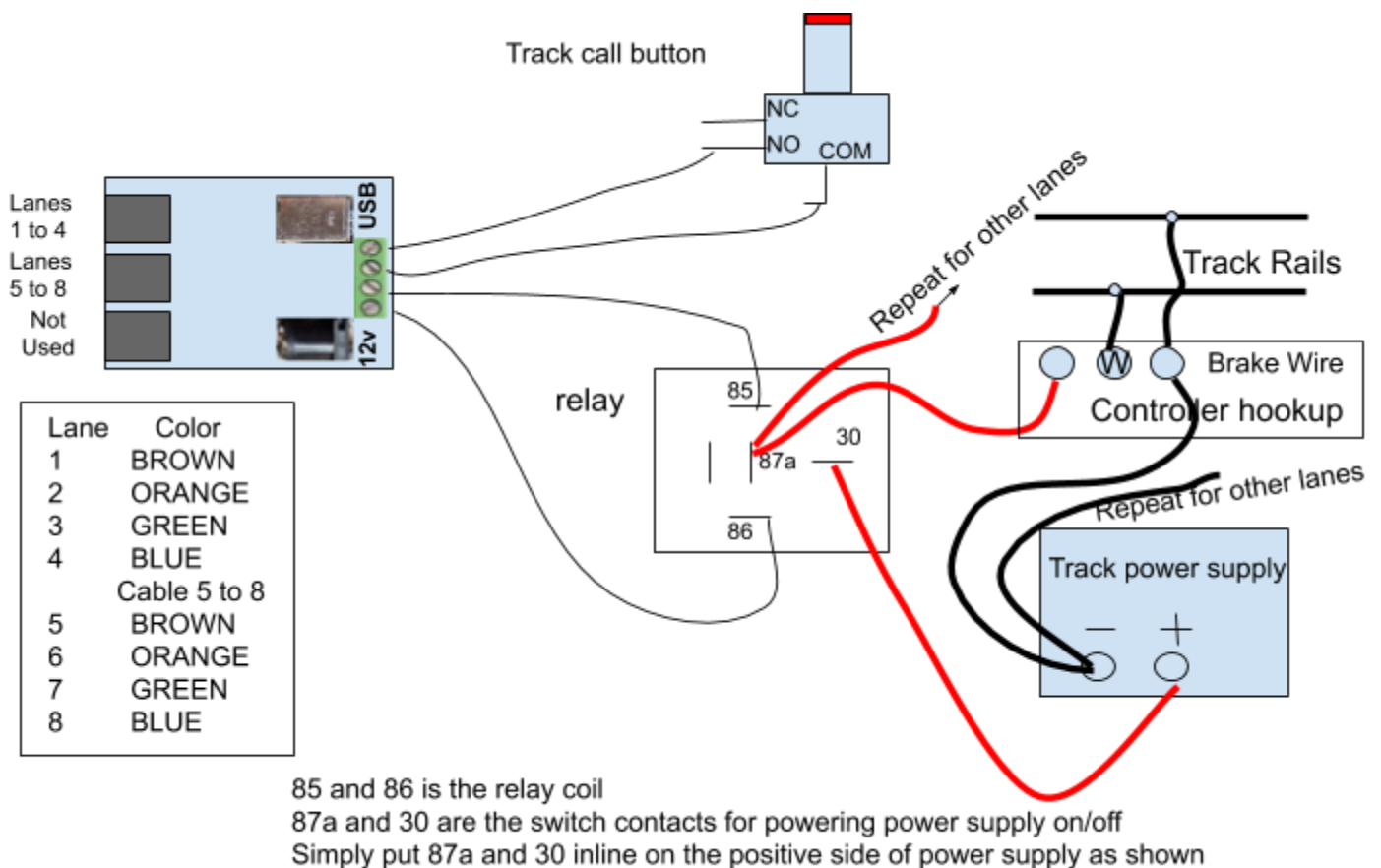
# Features

- 1 to 8 lanes
- Any sensor type, Infrared, Reed, Dead strip
- 1/1000 second accuracy
- Supports Lap and Timed Races and [Lane Rotation](#)
- Qualifying race format
- Auto sizes to full screen for easy viewing
- Supports up to 60 racers in round robin format
- Works with Desktops and laptops and netbooks even with no CD drive
- Hardware ensures accurate timing to .001 seconds even with background applications running or with program minimized
- New Hardware SCL3 connects to USB port
- Sound -"Ready GO", "1 Lap remaining" etc.
- Supports 1- 8 Lanes
- Relay to control track power
- Sorts racers according to position during race
- Displays - Lap Times, Best Lap, Median, lag/interval time between racers
- Set minimum lap time, to avoid false laps caused by riders(car in wrong slot)
- Ability to restart heat
- Print summary and lap times
- Enter racers names only once
- Change the type of data being displayed by clicking on heading. i.e.. MPH or Best Lap
- Timer between heats for complete hands off automated racing
- Championship mode, a series of short races with a point system.
- Supports straight and European rotation plus custom
- [Powerful Custom Rotation Editor](#)
- Auto pop-up race results option to add or subtract laps from racer after heat.
- Auto print results after heat
- On the fly add or subtract laps
- Race Results includes average number of laps per heat
- Rotation race supports timed and lap heats
- Optional warning sounds on countdown timer
- Resizing screen is possible
- Three styles of countdown, drag racing and Formula 1 and instant
- auto save data to text
- Break Out Feature - Disallow fast lap times below a predetermined lap time.
- Synthesized voice for lap times (see hotkeys)
- Sell time to customers ( requires sell time hardware)
- Clear data for one lane with one keystroke in practise
- Option to Rotate through Lanes more than once

## Installing Software

You may download the software from the TrackmateRacing.com web site, or use the software that came on the USB stick. After installing software and Trackmate interface is plugged in. Using the top menu Go to Settings>Installation settings and click Auto Set COM port, then select the correct sensor type. For any problems consult the troubleshooting section at the end of this manual or check the website for the latest FAQ.

## Installing Hardware

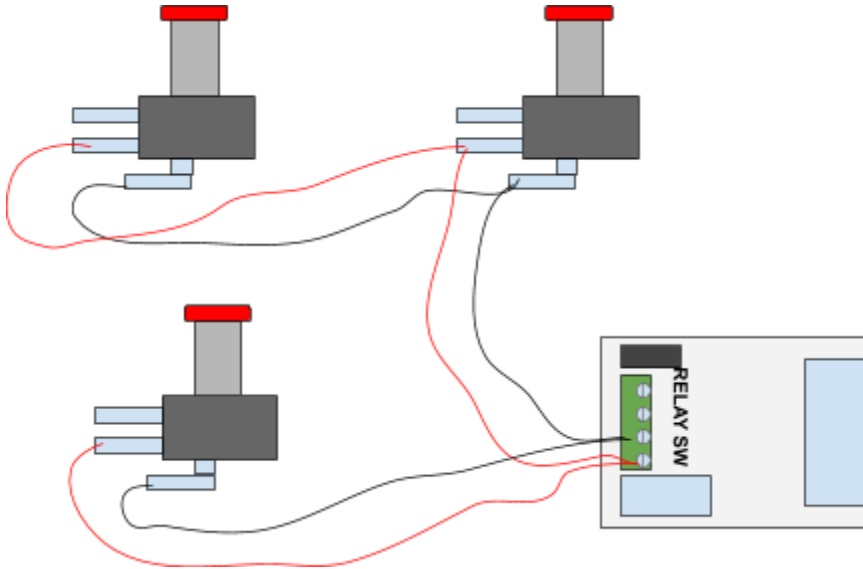


## Installing Track Call Button



**Buttons like this available at [www.TrackmateRacing.com](http://www.TrackmateRacing.com) Product# Jumbo**  
Install one or more track call buttons. Use connections COM and NO.

Installing more than one track call button



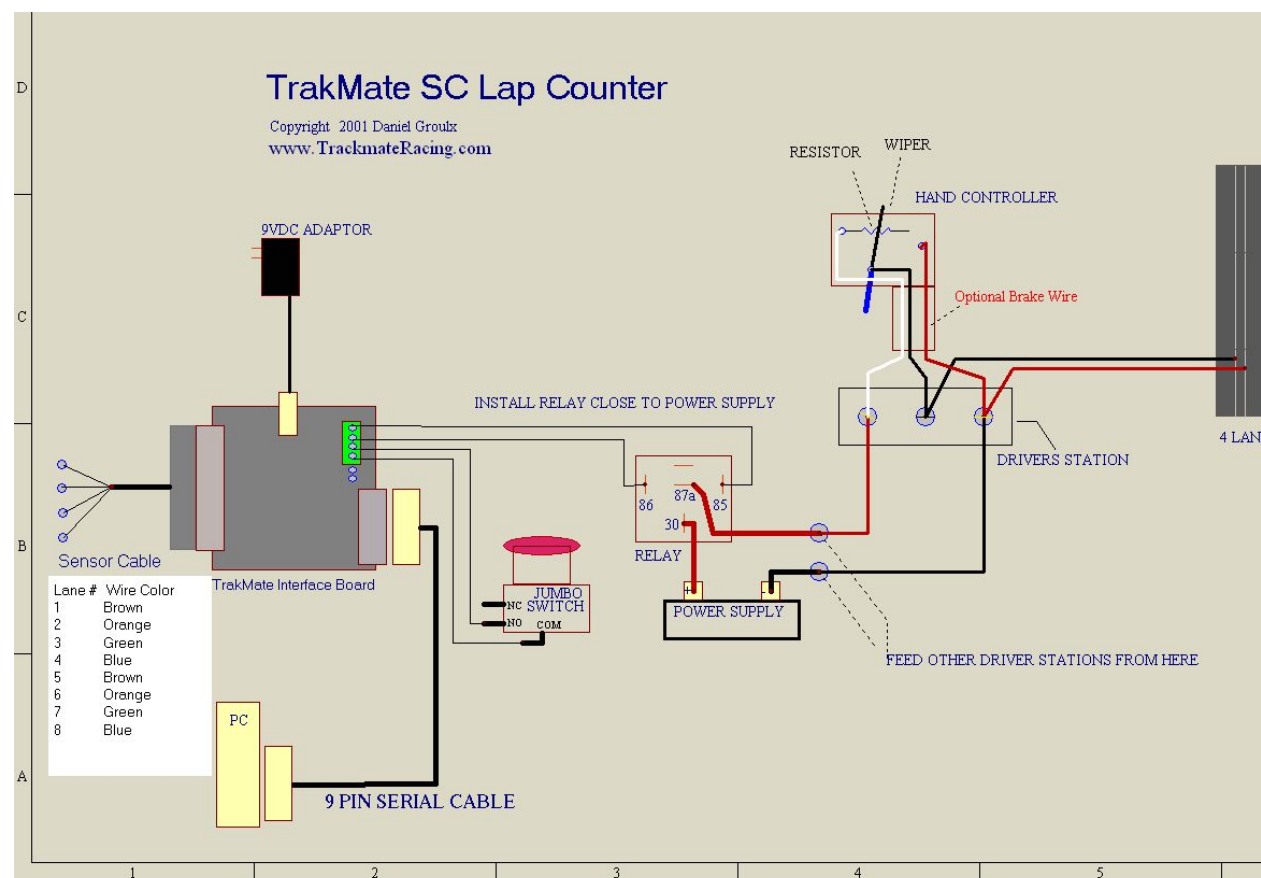
Two ways of wiring multiple switches. Run the wires from each switch back to the interface or wire from switch to switch or you can do a combination of both as shown in the diagram.

Troubleshooting track call buttons.

If the program keeps doing pause GO pause GO. Verify that you are using COM and NO connections on the switch. See diagram above.

Track call button must be connected to SW, if the relay is connected there you will experience this problem.

# Installing Interface Old Version



## Sensor Cable Color Code

Color	Lane	
brown	1	
orange	2	
green	3	
blue	4	
brown 2nd Cable	5	
orange	6	
green	7	
blue	8	

## Installing Infrared Sensors

Infrareds are the most popular type of sensor in slot cars. They work with any scale of slot cars.






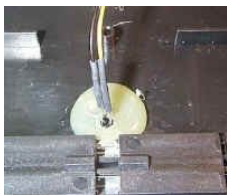

Follow these steps for the easiest way of installing sensors.

The advantages are perfect vertical installation of sensor and easy removal of sensor from track.

Shown is a Ninco track but the same technique can be used for all plastic tracks.

On HO tracks the sensor will be installed between the rail and the slot.



	<p>#1 Put a big blob of hot glue on the underside of the track to build up the track thickness.</p>
	<p>#2 Let it cool for 20 minutes then drill the hole for the sensor using a 1/8" drill bit.</p>
	<p>#3 Clean the edge of hole with a bigger drill bit, gently by hand</p>
	<p>#4 It will look like this On HO tracks the sensor is mounted between the rail and the slot</p>
	<p>#5 Insert Sensor. It will fit snugly into the hole, the sensor can be just a little below the surface.</p>
	<p>#6 Done!! You don't need to glue it in place.</p>
<p>#7 Completed Secure the sensor cable under the table so weight of cable does not pull the sensors out of the holes</p>	



## Installing LED Bridge/Gantry for infrared system

The LEDs mounted in the bridge provide a light source to the sensors in the track. The LEDs are infrared and invisible to the human eye. Place over the track, the alignment of the LED does not need to be accurate. In 2011 we started using newer LEDs that allow alignment to be off by 1/2 inch (12mm). Custom bridges are also available. Do not attempt to move LEDs, installing LEDs in a different location may 'break' the series circuit.

## Installing Overhead Infrared Kit

Our Lap counting kits come with the bridge/gantry but if you ordered an infrared kit to install in your own bridge here's how...

The adaptor wire with White stripe is Negative

Notice that the LEDs have a short and a long lead. Connect them as shown. If any one is connected backwards none of them will work. Resistors have no polarity and may be connected either way. Note that the LEDs emit light invisible to the human eye but the sensors will see it.

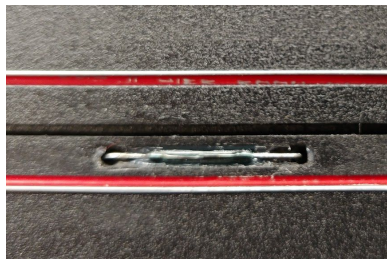
The LEDS should have a range of 3 to 5 inches.  
We also carry a pre-wired LED kit .

## Installing Reed Switches

Reed switches are small switches activated by the slot cars magnet. Recommended for HO slot cars only.



Underside of an HO track. Notice placement of the reed switch is in between the rail and the slot. You may use hot glue to hold it in place. We TrackmateRacing.com have replacement reed switches.



In this picture reed switch is install flush with the surface, and it will work with t-jets

## Installing Dead Strip

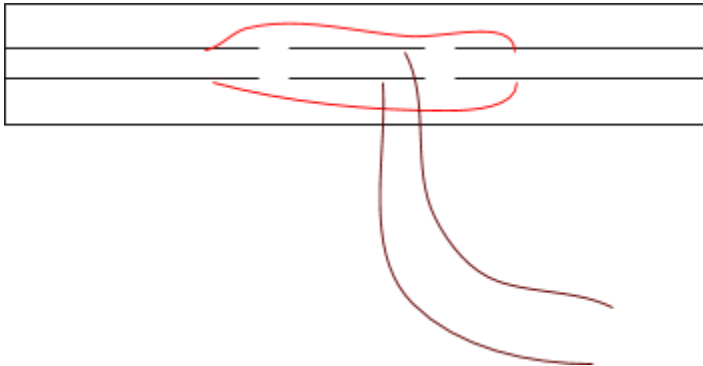
Important for deadstrip you must change sensor type.

In the Installation settings change 'sensor type' to *Dead Strip / Reed Switch*

Trackmate Dead Strip cables have custom electronics built into the connector for very reliable performance. Dead strip cables are available at

[www.TrackmateRacing.com](http://www.TrackmateRacing.com)

Dead strip is two to three inches of isolated track or up to 5 inches on commercial 1/24 scale tracks. Isolate both rails for each lane as shown in diagram



The dead strip works properly in one direction only. If you run your cars in both directions you will need to switch the wires around on the dead strip when you switch directions. There is also an optional bi-directional dead strip that has switches for direction.

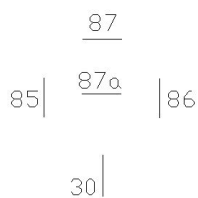
For proper operation the WHITE wire connects to the dead strips positive side, that's the passenger side(right side) for 1:32 and 1:24 scale or drivers side for HO

## Installing Relay



The Relay is a 12volt 30amp. Available at [www.TrackmateRacing.com](http://www.TrackmateRacing.com)

### Pin Out Bottom View



Step 1) Run two Wires from 85 and 86 to the two terminal screws marked RELAY

Step 2) Remove Power Wire from track power supply + Terminal

Step 3) Connect this end to 87a of Relay

Step 4) Add wire between 30 and power supply + Terminal

Notes:

Simply connect the two outer connections labeled relay to the relay coil pins 85 and 86 on an automotive relay.

Verifying voltage via the top screws is not reliable if the screws are not tightened. If you crimp your connections at the relay make sure the connection is good.

You should hear the relay click when pausing and restarting the race.

**I have no power when I start race and power when not racing?**

Go to Settings>Installation settings and toggle relay type.

## Software

### Main Screen

#### Lag First, Lag Behind, Median, Best Lap

The screen is divided into five columns. You may change what type of data can be displayed in the last two columns. Simply click on the column header before or during the race. For example you may change 'Lag First' to 'Lag Behind' or 'Median'. You may also use the F4, F5 function keys. (also see hotkeys)

**Lag First**- Amount of time racer is behind leader

**Lag Behind**- Amount of time racer is behind next position

**Median-** Is like Average but works much better because crashes won't skew the numbers , if you have a median of 5.4 seconds it means 50% of your laps are faster than 5.4 seconds and 50% are slower than 5.4 seconds.



00:00				Abort
Lap	Lap Time	Median	Best Lap	

**Reset Best Lap**

You can reset the best lap for any racer by clicking on their best lap field.

**Track Name**

You can toggle between Track Name and Race Format by clicking on it



## Installation Settings

**Installations Settings**

**Track**

Track Name:

Number of Lanes:  Scale - MPH:

**Lane Color**

Lane	Color	Disable
1	Red	<input type="checkbox"/>
2	White	<input type="checkbox"/>
3	Orange	<input type="checkbox"/>
4	Green	<input type="checkbox"/>
5	Blue	<input type="checkbox"/>
6	Yellow	<input type="checkbox"/>
7	Purple	<input type="checkbox"/>
8	Grey	<input type="checkbox"/>

**Track Length, feet**

Lane	Length (feet)
1	30
2	30
3	30
4	30
5	30
6	30
7	30
8	30

**Hardware**

Com Port:

☐ Test software in Demo Mode - No hardware required

Relay:

Sensor Type:  Sensor Debounce:

**Sell Time**

☐ Standard Sell Time Hardware Installed ☐ Sell Time by Lane

☐ Wireless Sell Time Installed Track#:

**Password**

☐ Password Protect Settings Password:

**Number of Lanes** - Select number of lanes

**Select Lane Color** - Black is not available, If you have a black lane use Grey instead

**Track Name** - The name here will appear in printouts

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These are important settings

**Sensor Type** - Select correct sensor type, Laps will not count if incorrect sensor type is selected.

**Sensor Debounce** - Leave it at 1

**Relay type** - If contacts 87a and 30 are used select *Normally Closed Contacts*. If track power is On when it should be off and Off when it should be on; change the setting.

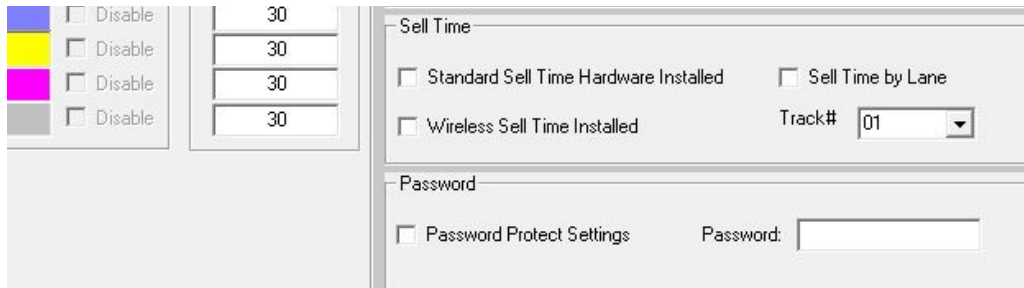
**Com port** - Com ports 1 to 16 are supported.

The new (2015) Trackmate interface is USB and creates a virtual COM port. Upgrading to version 8.4 or later is highly recommended.

Have your interface plugged into the computer and powered on and Use the *Auto Set Com Port* button to automatically select the COM port.

**Sell Time Hardware Installed** - You must have this checked if you have the Sell Time hardware installed. It must remain checked even when not selling time.

**Sell time by lane** - Check this box when you want to sell time by lane. A \$ sign will appear in the top left corner of the screen when it sells mode.

The image shows a screenshot of a software settings window. On the left, there are four colored squares (blue, yellow, magenta, grey) each with a 'Disable' checkbox and a numeric input field set to '30'. The main window is divided into two sections. The top section is titled 'Sell Time' and contains two checkboxes: 'Standard Sell Time Hardware Installed' and 'Wireless Sell Time Installed', both of which are checked. To the right of these checkboxes is another checkbox labeled 'Sell Time by Lane' which is unchecked, and a 'Track#' dropdown menu showing '01'. The bottom section is titled 'Password' and contains a checkbox labeled 'Password Protect Settings' which is unchecked, and a 'Password:' text input field.

If you have the Wireless Sell time, put a checkmark for Wireless Sell Time Installed.

You must configure the track#. You can not have two tracks with the same Track#

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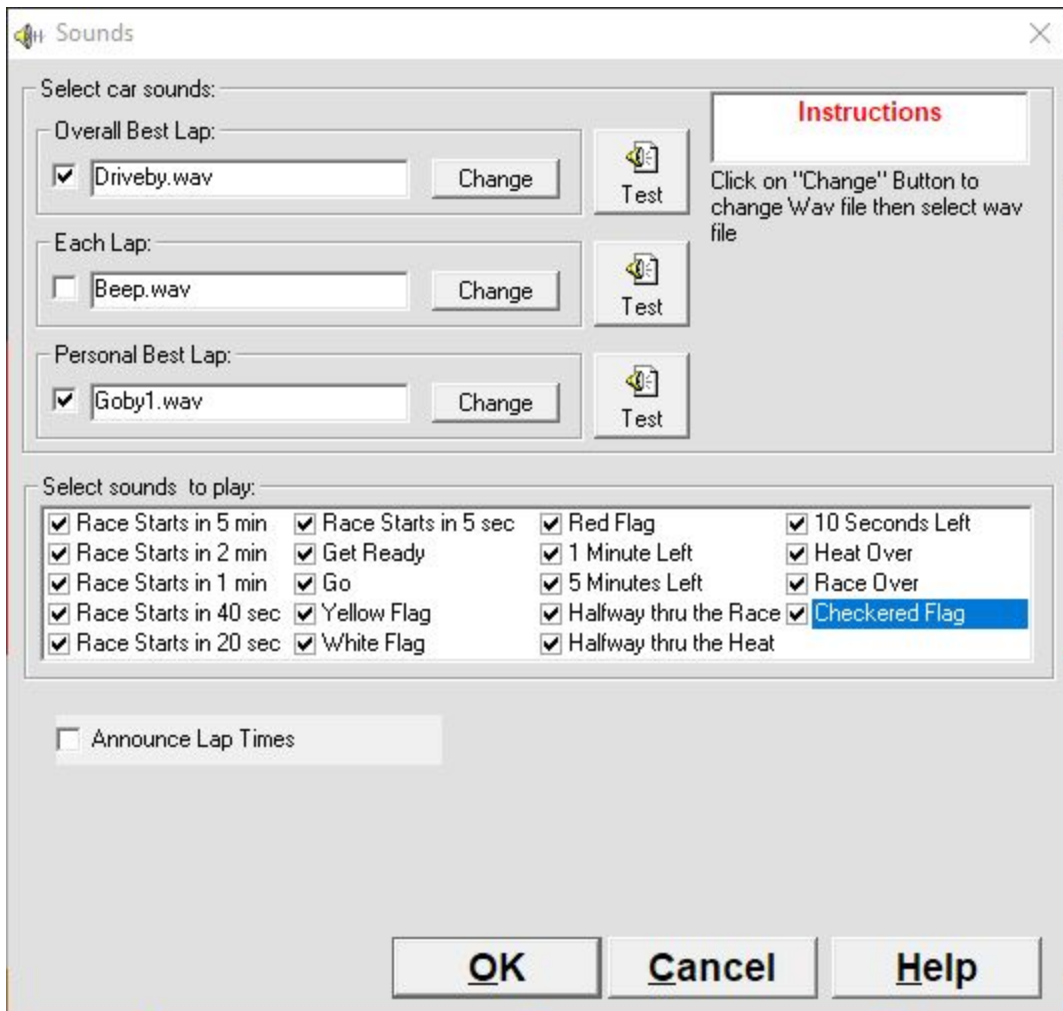
**Password protect settings** - You can enable password so users can not change installation settings as wrong settings can create problems. You should also enable password if you do time sell.

## Starting Your First Race

1. Click on *racers* on the top menu bar to add the names of those that will be racing. You can also remove the names that came with the program.
2. Click *Race format, select type of race* then *select racers*
3. Click the start button and start racing

## Options

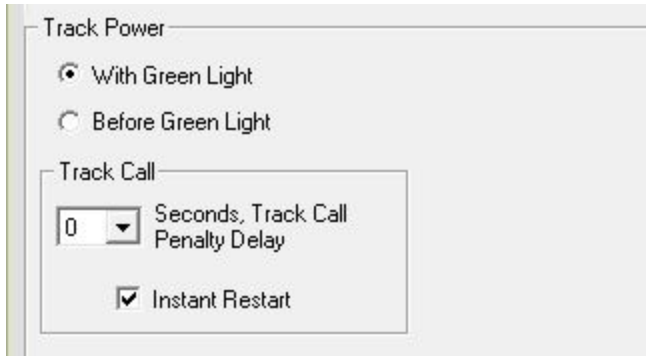
### Sound



There are many sounds available you can select which sounds to enable or disable. Click on *setting->sound* to access this form. Click the test button to make sure the sound you selected is appropriate. Sounds are stored in `My_documents\trackmate-slotcar-timer\sound` You can add your own sounds and select them from this screen.



## Track Power



The screenshot shows a software window titled "Track Power". Inside, there are two radio buttons: "With Green Light" (which is selected) and "Before Green Light". Below these is a sub-section titled "Track Call" which contains a spinner box set to "0" with the label "Seconds, Track Call Penalty Delay" and a checked checkbox labeled "Instant Restart".

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**With Green Light** - Track power comes when green light comes on, which makes it impossible to false start.

**Before Green Light** - Track power comes on a few seconds before Green light, If a racer leaves too early his first lap will not count.

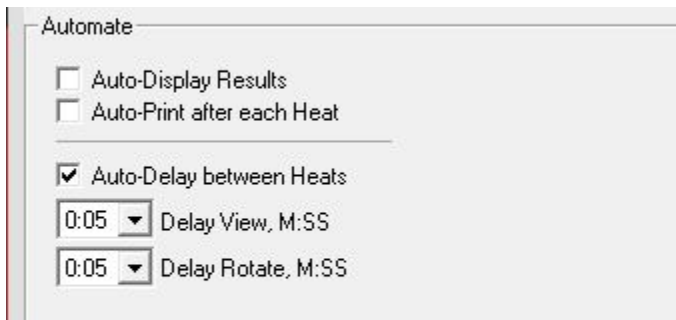
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**Track Call** seconds - Normally left at 0, but some racers prefer to penalize a racer for hitting the track call button so .5 to 3 seconds of delay can be added before the track shuts power off

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**Instant Restart** - check this box if you want instant restart with no count down after a track call.

## Options - Automate Rotation

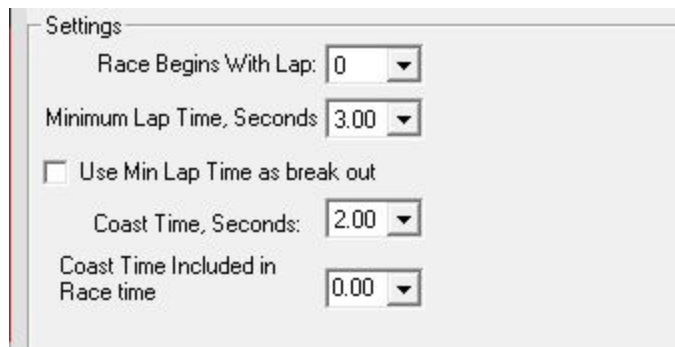


The 'Automate' settings window contains the following options:

- ☐ Auto-Display Results
- ☐ Auto-Print after each Heat
- ☒ Auto-Delay between Heats
- Delay View, M:SS: 0:05
- Delay Rotate, M:SS: 0:05

A very liked feature is the automated rotation. This allows you to run a complete race with up to 60 racers without having to touch the computer. Another huge advantage is the race is completed in a much shorter time as racers know their time is limited between heats.

In the screenshot below Auto print after each heat was selected, a 10 second delay after the heat is over is used to view the screen after each heat, then the screen will automatically rotate the racers to their new lanes and wait another 50 seconds before automatically powering on the track for the next heat.



The 'Settings' window contains the following options:

- Race Begins With Lap: 0
- Minimum Lap Time, Seconds: 3.00
- ☐ Use Min Lap Time as break out
- Coast Time, Seconds: 2.00
- Coast Time Included in Race time: 0.00

### Race Begins With Lap 0,1

Race begins with laps 0 recommended. Place car before bridge, first time it crosses sensor it will count as lap 0, next time around will be a complete lap and count as lap 1

### **Minimum Lap Time**

Set this below the best possible lap time. This feature is useful in avoiding invalid lap times caused by slot cars accidentally jumping into another lane and tripping the lap counter. The minlap.wav file will play when it is below minimum lap time. Lap time will still appear on the screen with a black background

### **Use Minimum Lap Time as break out**

You may limit how fast a racer can go by not counting the lap if it is below a certain time. The minlap.wav file will play when it is below minimum lap time. No Lap will count even if the racer is below the minimum lap time many times in a row. Lap time will still appear on the screen with a black background. Leave this unchecked if you have no need for this feature.

### **Coast Time**

Since slot cars keep traveling a few feet for a few seconds after power is shut off, we still want the lap counter to count a lap after the slot car crosses the sensor. Coast time is the amount of time sensors are active for lap counts after power is shut off to track.

### **Coast Time Included**

Some racers will argue that the coast time should be included in the heat time. Others argue that it should not be included in the heat time. Well now you can select even the amount of time that should be included in the heat time. This value can never be greater than coast time.

# Race Formats

## Practice

In practice mode up to 3000 laps can be counted. You can also reset your best lap time and laps by clicking on it. New in version 6 is the Voice option. Hear your lap times as you go over the sensor. To toggle voice on/off use the ALT and Lane number. ie ALT1

### Practice with rotation

Don't let one racer hog a lane, make them rotate through the lanes

## Lap Race

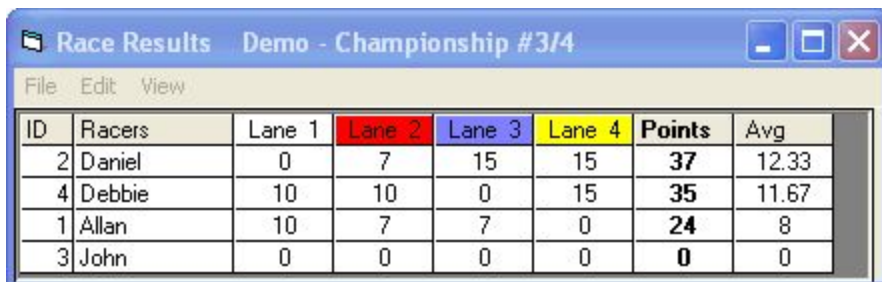
The most popular race format for casual racing. Like real full scale racing, the race ends after the leader completes all laps and remaining racers complete their current lap. It will time out if one racer takes too long to complete his lap. If you have the relay option. See *options->track power* you may want to try the *option-track power on before green light*.

## Timed Races

Race ends after time ends and all cars finish their current lap. If a car takes too long to complete the current lap it will time out and end the race.

## Championship Race

Championship Race is usually well suited for crash and burn racing, meaning when you crash you are out of the race. It works just like a rotation race with lap heats but points are assigned depending on where you finish in the race. Each racer races in each lane once.



ID	Racers	Lane 1	Lane 2	Lane 3	Lane 4	Points	Avg
2	Daniel	0	7	15	15	37	12.33
4	Debbie	10	10	0	15	35	11.67
1	Allan	10	7	7	0	24	8
3	John	0	0	0	0	0	0

click View->Race Results to see points

You can also assign point system click Race Format->Select Championship Race then click Championship Point System

A popular format is to set the number of laps to 10, and set *repeat lane* to 3, so you can race in each lane 3 times in a row before moving on to the next lane. This will create 12 10 lap races on a 4 lane track. Championship software will keep track of the points for each race.

## Rotation

Rotation lets every racer race the same amount of time in each lane.

There are two types of rotation. Rotation with lap heats and Rotation with timed heats. If you have more racers than the number of lanes use Round Robin format.

Rotation Race Lap Heats - Heat ends immediately and power is shut off when one of the racers completes the number of laps per heat.

Rotation Race Timed Heats - Heat ends immediately and power is shut off when time expires. This is the preferred method for most clubs.

If you have more racers than the number of lanes uses the Round Robin race format. You can also have rotation completely automated to auto start next heat. See [Automation](#)

## Round Robin

Round Robin is identical to rotation races but used when there are more racers than number of lanes. You cannot change name by clicking on it as in Rotation Races, you must change names using the Racers Menu

There are two types of Round Robin. Rotation with lap heats and Rotation with timed heats. If you have more racers than the number of lanes use Round Robin format.

Rotation Race Lap Heats - Heat ends immediately and power is shut off when the car completes a number of laps.

Rotation Race Timed Heats - Heat ends immediately and power is shut off when time expires. This is the preferred method for most clubs.

# Custom Rotation

## Custom Rotation Editor

So what's the big deal about the rotation editor?

The rotation editor allows you to go through the lanes in any sequence.

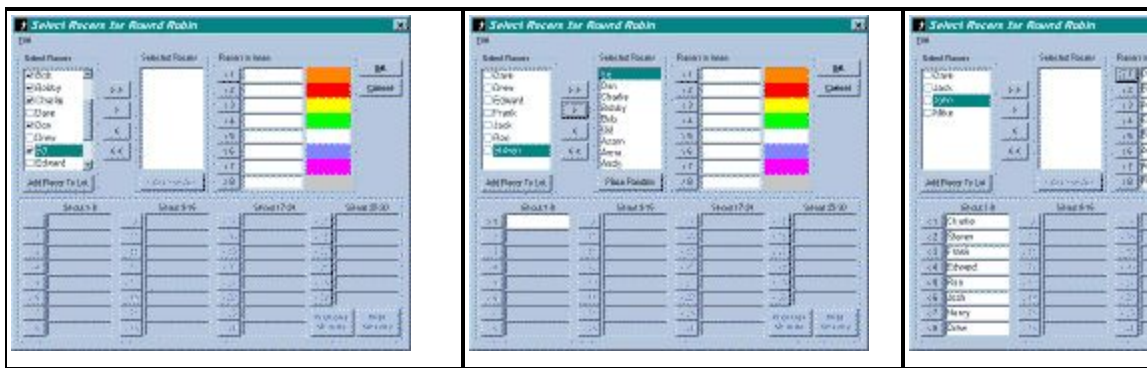
Let's say you have an 8 lane track and 16 racers. With a custom rotation editor you could create 2 groups of 8 racers but they're all in the same race. The first group would race then the next group and so on. I'll show you how.

1) select custom rotation

2) enter 102030405060708

That's it, a 0 represents a sit out.

3) Select names



4) click View -> Rotation Sequence

Heat Sequence								
Print Grid	Lane 1	Lane 2	Lane 3	Lane 4	Lane 5	Lane 6	Lane 7	Lane 8
	Orange	Red	Yellow	Green	White	Blue	Purple	Grey
Heat 1	Bobby	Ron	Azam	Frank	Andy	Bob	Drew	Edward
Heat 2	Jack	Bill	Anne	Ed	Don	Charlie	Dave	Steven
Heat 3	Edward	Bobby	Ron	Azam	Frank	Andy	Bob	Drew
Heat 4	Steven	Jack	Bill	Anne	Ed	Don	Charlie	Dave
Heat 5	Drew	Edward	Bobby	Ron	Azam	Frank	Andy	Bob
Heat 6	Dave	Steven	Jack	Bill	Anne	Ed	Don	Charlie
Heat 7	Bob	Drew	Edward	Bobby	Ron	Azam	Frank	Andy
Heat 8	Charlie	Dave	Steven	Jack	Bill	Anne	Ed	Don
Heat 9	Andy	Bob	Drew	Edward	Bobby	Ron	Azam	Frank
Heat 10	Don	Charlie	Dave	Steven	Jack	Bill	Anne	Ed
Heat 11	Frank	Andy	Bob	Drew	Edward	Bobby	Ron	Azam
Heat 12	Ed	Don	Charlie	Dave	Steven	Jack	Bill	Anne
Heat 13	Azam	Frank	Andy	Bob	Drew	Edward	Bobby	Ron
Heat 14	Anne	Ed	Don	Charlie	Dave	Steven	Jack	Bill
Heat 15	Ron	Azam	Frank	Andy	Bob	Drew	Edward	Bobby
Heat 16	Bill	Anne	Ed	Don	Charlie	Dave	Steven	Jack

Notice how everyone in heat 1 races together again in heats 3,5,7,9,11,13,15

How about taking a break after 2 or 3 heats. No problem

**Race Format**

Race Format:  
Round Robin

Number of Minutes: 0.25

Rotation Sequence

☐ Straight: 12345678  
☐ European: 13578642  
☒ Custom: 13570008600042

Championship Point System

☒ Auto-Delay between Heats  
5 Delay View, sec.  
5 Delay Rotate, sec.

☒ Demo Mode

Select Racers

OK Cancel

**Heat Sequence**

Print Grid	Lane 1	Lane 2	Lane 3	Lane 4	Lane 5	Lane 6	Lane 7	Lane 8
	Orange	Red	Yellow	Green	White	Blue	Purple	Grey
Heat 1	Bobby	Ron	Azam	Frank	Andy	Bob	Drew	Edward
Heat 2	Jack	Frank	Bobby	Dave	Azam	Edward	Andy	Ed
Heat 3	Steven	Dave	Jack	Charlie	Bobby	Ed	Azam	Anne
Heat 4	Ron	Charlie	Steven	Don	Jack	Anne	Bobby	Bill
Heat 5	Frank	Don	Ron	Bob	Steven	Bill	Jack	Drew
Heat 6	Dave	Bob	Frank	Edward	Ron	Drew	Steven	Andy
Heat 7	Charlie	Edward	Dave	Ed	Frank	Andy	Ron	Azam
Heat 8	Don	Ed	Charlie	Anne	Dave	Azam	Frank	Bobby
Heat 9	Bob	Anne	Don	Bill	Charlie	Bobby	Dave	Jack
Heat 10	Edward	Bill	Bob	Drew	Don	Jack	Charlie	Steven
Heat 11	Ed	Drew	Edward	Andy	Bob	Steven	Don	Ron
Heat 12	Anne	Andy	Ed	Azam	Edward	Ron	Bob	Frank
Heat 13	Bill	Azam	Anne	Bobby	Ed	Frank	Edward	Dave
Heat 14	Drew	Bobby	Bill	Jack	Anne	Dave	Ed	Charlie
Heat 15	Andy	Jack	Drew	Steven	Bill	Charlie	Anne	Don
Heat 16	Azam	Steven	Andy	Ron	Drew	Don	Bill	Bob

**Tip:** Always check the view rotation sequence before starting a race. You can also print it, the button is in the top left corner.

Wait, you can do more.....

Let's say you have a 6 lane track and you only have 5 guys that showed up. You decide you only want to race the middle lanes 2,3,4,5 and have 1 guy marshalling the track. You also want to do European style not straight rotation, that way you won't be racing next to the same guy all the time. No problem.

The custom sequence would be 3542. That's it, pretty easy.

Click on View Rotation and this is what you get



Heat Sequence						
Print Grid	Lane 1	Lane 2	Lane 3	Lane 4	Lane 5	Lane 6
	Orange	Red	Yellow	Green	White	Blue
Heat 1	Empty	Bobby	Azam	Ed	Bob	Empty
Heat 2	Empty	Ed	Don	Bob	Azam	Empty
Heat 3	Empty	Bob	Bobby	Azam	Don	Empty
Heat 4	Empty	Azam	Ed	Don	Bobby	Empty
Heat 5	Empty	Don	Bob	Bobby	Ed	Empty

Notice the gutter lanes 1 and 6 are always empty just like you wanted.  
Notice you never race beside the same guy, that's European rotation

## Qualify Timed

Select Race format> Qualify timed

**Important** -> Select Custom Rotation and select Qualifying lane

The image shows a 'Race Format' dialog box with the following settings:

- Race Format:** Qualify Timed (selected in a dropdown)
- Number of Minutes:** 0.25 (in a dropdown)
- Qualify Lane:** 1 (in a dropdown)
- Rotation and Round Robin Races:**
  - ☒ Straight: 1234
  - ☐ European: 1342
  - ☐ Custom: 123
- Repeat Lane:** 1 (in a dropdown)
- Repeat Track:** 1 (in a dropdown)
- Championship Point System:** (checkbox, currently unchecked)
- Select Racers:** (button)
- OK** and **Cancel** buttons at the bottom.

Select all the racers that will qualify

After all the racers have qualified... software will automatically save the qualifying data in...

My Documents\trackmate-slotcar-timer\data\Qualify\qualify151109-2106.txt

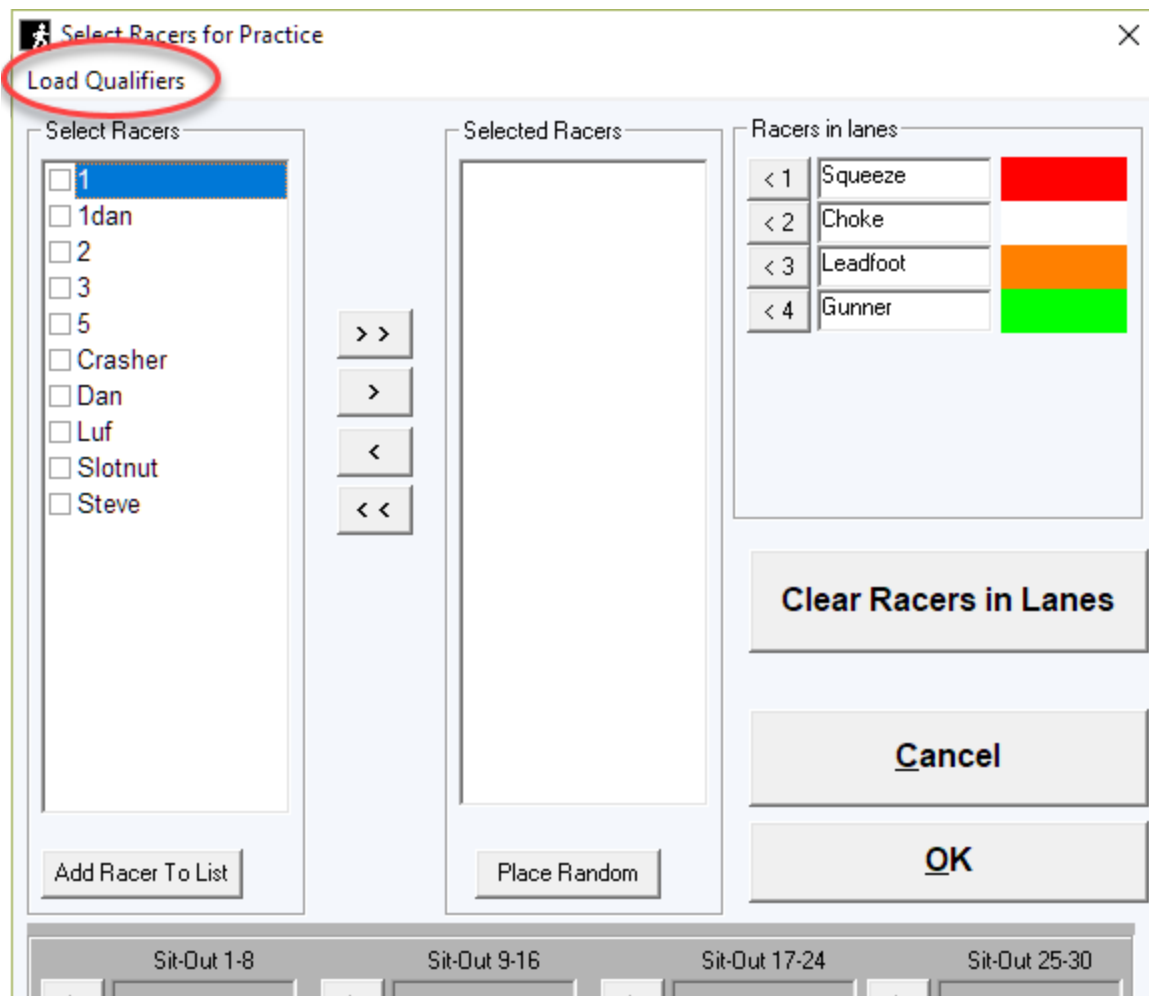
Note file name indicates date and time ex. 2015 nov 9 at 21:06



## 2) Race

Select Rotation race and european rotation (or whatever you want)

Click File>load Qualifiers .Go to correct directory(it should remember next time) and select file. Qualifiers will appear with qualifying position number in select box.....Now you can place them in their lanes



## How to...

### How To Disable a Lane

You only want to race in lanes 2,3,4 of the four lane track, use a custom rotation 234

See custom rotation for more details.

### How to change sound

From the Menu>Sound you can *select car sounds* for when the car crosses the sensor. You can also add your own sounds if the provided sound files are not to your liking. Simply add .wav file to

My\_documents/Trackmate-slotcar-timer/LapSound

The other sounds can not be easily changed in the software, but you can replace the wav file. The sounds are kept in the Sound directory

My\_documents/Trackmate-slotcar-timer/SCLSound. For example if you wanted to replace the sound GO with a horn sound, you can record a horn sound or maybe find one on the internet, rename it as go.wav and replace the original go.wav file

.

## Files

Files and settings are kept in My Documents\Trackmate-slotcar-timer. If you use autosave to .txt files you will also find those files there. You can also access the files directly by using File>Open from the Trackmate software.

# Hot Keys

Shortcut keys for main window

Key(s) Description

*Space Bar or S key* *Track call - Start Race - Pause - Continue*

F1 Help

F2 Sell Time menu

F4 Select data type in column 4, Lag Behind, Lag First, Median

F5 Select data type in Column 5, Best Lap, MPH, Median

F8 Decrease text size

F9 Increase text size

**O Power off - works even when not racing**

**P Power On - works even when not racing**

L Lap Race

CTRL+D Diagnostic

CTRL+F Race format

CTRL+L View Laps

CTRL+O Open File, Laps or Summary

CTRL+Q Quit / Exit

CTRL+R Racers

CTRL+S Settings

CTRL+T

CTRL+U View Summary

1 Reset best lap for first lane

2 Reset best lap for second lane

3 Reset best lap for third lane

4 Reset best lap for fourth lane

5 Reset best lap for fifth lane

6 Reset best lap for sixth lane

Shift+1 to 8 Add a lap to lane number

Ctrl+1 to 8 Subtract a lap to lane number

ALT + LANE NUMBER (ie. ALT 2 for lane 2) Toggles synthesized lap time voice for that lane. (Voice drivers must be installed, found in the Voice Driver directory on the CD)

# FAQ

## Frequently Asked Questions

### **Do I need the relay for the lap counter to work?**

No you do not need the relay. Lap races or championship race formats are recommended when not using the relay. When not using the relay the 12 volt adapter is not needed (On new USB version)

### **How do I take it out of DEMO mode?**

This option has been moved in version 6.6

Go to Settings>Installation Settings>Hardware and uncheck Demo option.

### **How many relays can I connect to the interface?**

3 Relays (400ma max).

### **I received a 12 volt power pack but it says 9v on the interface, is that ok?**

We are now shipping 12 volt power packs, it's not a problem.

### **I can't enter racers names in some lanes in the Select Racers screen?**

If you are using custom rotation, only lanes entered in custom rotation will be available.

FAQ for older version

## Troubleshooting

### TrackMate Windows Lap Counter Troubleshooting Guide

Check the support section at [TrackmateRacing.com](http://TrackmateRacing.com) for the latest troubleshooting guide.

### **What Files do I need to install?**

Install USB to serial for black Trackmate interface found on the CD or USB stick  
Install Slot Car Lap Counter

### **Where do I plug in the sensor cable?**

Plug sensor cable in Lane 1 to 4

### **What is the Gantry Connector used for?**

Connector is for future use and is currently not used yet .

## **I get "Trackmate Interface not found" message when I start race**

Run **Install USB to serial for black Trackmate interface** found on the CD.

May also be call **USB to serial FTDI**

Plug USB cable back in. Run Autoset com port in Settings>Installation settings  
If the problem persists it can be that the Autoset com port selected the wrong com port. Look at Device Manager>Ports to see what Com port you have. You can also just try com ports 3,4,5,6 that will usually work 99% of the time. Call Trackmate if you need further assistance with this.

## **The infrared kit/bridge doesn't work the LEDs don't come on**

The LEDs are infrared and invisible to the human eye.

## **Relay not working (for new SCL3 USB black interface board)**

Check installation settings and make sure that relay option is **not** set to none.

A 12 volt adapter needs to be plugged into the interface for the relay to work.

The adapters we ship have an LED on them, is the LED on? 12volt LED on interface should come on.

If you are using your own adapter, the adapter must have a 2.1mm plug with center negative. Some relays have a diode across the coil if pins 85 and 86 are connected wrong then diode will conduct and short the 12 volt adapter and possibly kill it. Trackmate does not ship relays with diodes

## **When I start the race I get a "runtime error 91"?**

This is a sound related problem. Plug a set of speakers or headphones into the computer and restart the program.

## **Error 62**

Uninstall program and reinstall under c:\ not C:\program files

## **I have a 6 lane but only 4 lanes are counting**

This is caused by powering on the Trackmate Racing interface card after starting the Trackmate Racing software. Make sure you always power the interface card first then start the program.

## **It always goes into Demo Mode?**

This means it cannot find the interface board. Make sure you have the proper com port selected

**The LED only comes on for only one second when it powers on, is the board bad?**

No, The LED will blink once or twice when the board powers up, it will also be on when it transmits data during a race and off during track calls.

**The power is on when it should be off and vise versa**

click on Settings->Installation Settings and change relay type

**It counts a lap as soon as I start race**

Could be caused by having the wrong sensor type selected.

Can also be due to insufficient light above the sensors. Fluorescent light won't work, use an infrared kit or 12 volt light bulbs or regular light bulb above track. In most cases ambient room light is insufficient. Trackmate Racing now sells light Bridges for any type of track.

**How to import names after installing latest version**

Version 8.50 and above stores names in my documents\trackmate-slotcar-timer

**Can I connect more than one relay to the interface?**

Yes, you can connect up to 3 relays, or 4 relays using a power adapter with a higher current rating

**Can I connect more than one track call button**

Yes, see manual in the hardware installation section on how to.

**Power adapters**

Power adapter is not required if you are not using the relay. You can use either 9 or 12 volt adapters. They should be 350 ma or more, 2.1mm plug and center negative.

**Troubleshooting Dead strip**

**Not counting laps**

If it counts laps when you go very slow and not when you go fast, test this by pushing the car over the dead strip by hand, if it counts a lap it means you have the wires reversed on your dead strip. Reverse the wires or if you have a bi-directional dead strip board, flip the little black switches on it.

**It doesn't count at all or counts laps all the time**

Make sure you selected dead strip version in settings

Do not convert an infrared type by removing sensors and connecting it to a Dead Strip. This may damage the computer port because the car generates a voltage.

# \*\*\*FAQ for older Trackmate interface only



Older Interface part# SCL-R

## Can I use a USB to serial converter?

Yes it will work with Trackmate Racing, you may also order a USB converter through TrackMate Racing

## Error 8020

This is usually caused by the USB to serial/driver problem. The USB to serial that Trackmate carries are very good and have never seen this problem with our USB to serial.

Note that the new Trackmate interface has the USB to serial built in so this should no longer be a problem.

## Power adapters

You can use either 9 or 12 volt adapters for the interface. They should be 350 ma or more, 2.1mm plug and center negative.

## Software Updates

Download from the web site the latest version

Register your email at [www.trackmateRacing.com](http://www.trackmateRacing.com) to receive the latest updates.

# Trackmate Products

Trackmate Racing Also Sells

1. Power Supplies
2. Slot car driver stations
3. Slot car mini relay panel
4. Slot car controllers
5. Drag Racing Timing for slot cars, R/C cars, Cars, ATVs etc.
6. RC transponders / Lap Counters (for radio controlled cars)
7. Sports Timers
8. Custom Timing Solutions

Visit [www.TrackmateRacing.com](http://www.TrackmateRacing.com)



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