Slot Car Lap Counter

SCLUSB V9.61

USER MANUAL

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 the accuracy of 1/1000 of a second. Trackmate hardware can support 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. Laptops, Netbooks, Desktop computers with a USB port is required. CD drive not required.
Software will run on Windows XP, ME, Vista, Windows 7, Windows 8, Windows 10.
Windows 11,
Note: Software will NOT run on Chromebooks, Apple products or Android tablets.

This manual contains important information for correct installation and operation of the lap counter. Please read through the instructions and keep this manual for quick reference. More information and support is also available on the website under the support section.

Features

- 1 to 8 lanes
- Up to 60 racers in round robin format
- Compatible with any sensor, Infrared, Reed, Dead Strip
- Lap and Timed Races, and Lane Rotation including European and custom
- Powerful Custom Rotation Editor
- Championship mode, a series of short races with a point system.
- Qualifying race format
- On the fly add or subtract laps
- Auto sizes to full screen or resize for easy viewing
- Three styles of countdown; drag racing, Formula 1 and instant start
- Hardware ensures accurate timing to .001 seconds even with background applications running or with program minimized
- Sound: "Ready GO", "1 Lap remaining", etc.
- Optional warning sounds on countdown timer
- Synthesized voice for lap times (see hotkeys)
- Relay to control track power
- Enter racers names only once
- Sort racers according to position during the 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
- 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
- Auto pop-up race results option to add or subtract laps from racer after heat
- Auto print results after heat
- Print summary and lap times
- Race Results include average number of laps per heat
- Rotation race supports timed and lap heats
- Auto Save data to text
- Break Out Feature - Disallow fast lap times below a predetermined lap time.
- 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
- Works with Desktops and laptops and netbooks even with no CD drive

Installing Software

Install the software from the included USB stick or download from website; www.trackmateracing.com/..........
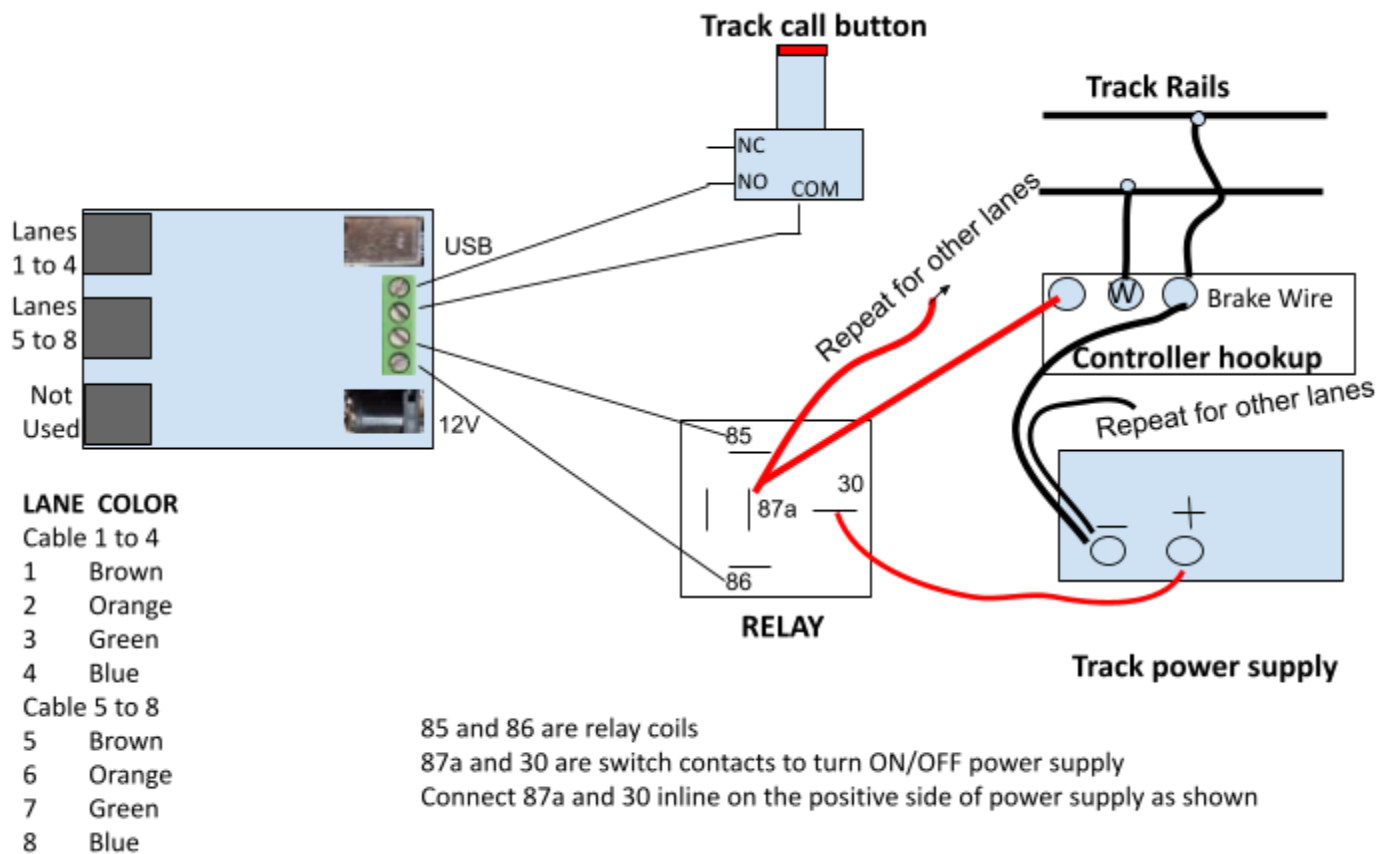After software is installed and the Trackmate interface is plugged-in using the Top menu, go to Settings>Installation Settings and click Auto Set COM Port; select the correct sensor type. For any problems consult the troubleshooting section at the end of this manual or check the website for the latest FAQ.

Interface not found error
If you get the interface not found error follow these steps:
Click Help>Install USB to serial driver. Unplug the USB cable and plug it back. Wait for 2 minutes. Restart the Trackmate software and try again.

Installing Hardware

Track call button

Track Rails

NC
NO   COM

Lanes 1 to 4

USB

Lanes 5 to 8

Repeat for other lanes

W   Brake Wire

Controller hookup

Not Used

12V

Repeat for other lanes

85

30

87a

86

RELAY

Track power supply

LANE COLOR
Cable 1 to 4
1   Brown
2   Orange
3   Green
4   Blue
Cable 5 to 8
5   Brown
6   Orange
7   Green
8   Blue

85 and 86 are relay coils
87a and 30 are switch contacts to turn ON/OFF power supply
Connect 87a and 30 inline on the positive side of power supply as shown

Installing Track Call Button

Button like is available to order on-line at; www.TrackmateRacing.com (Product# Jumbo)
One or more track call buttons can be installed. Use connections COM and NO.
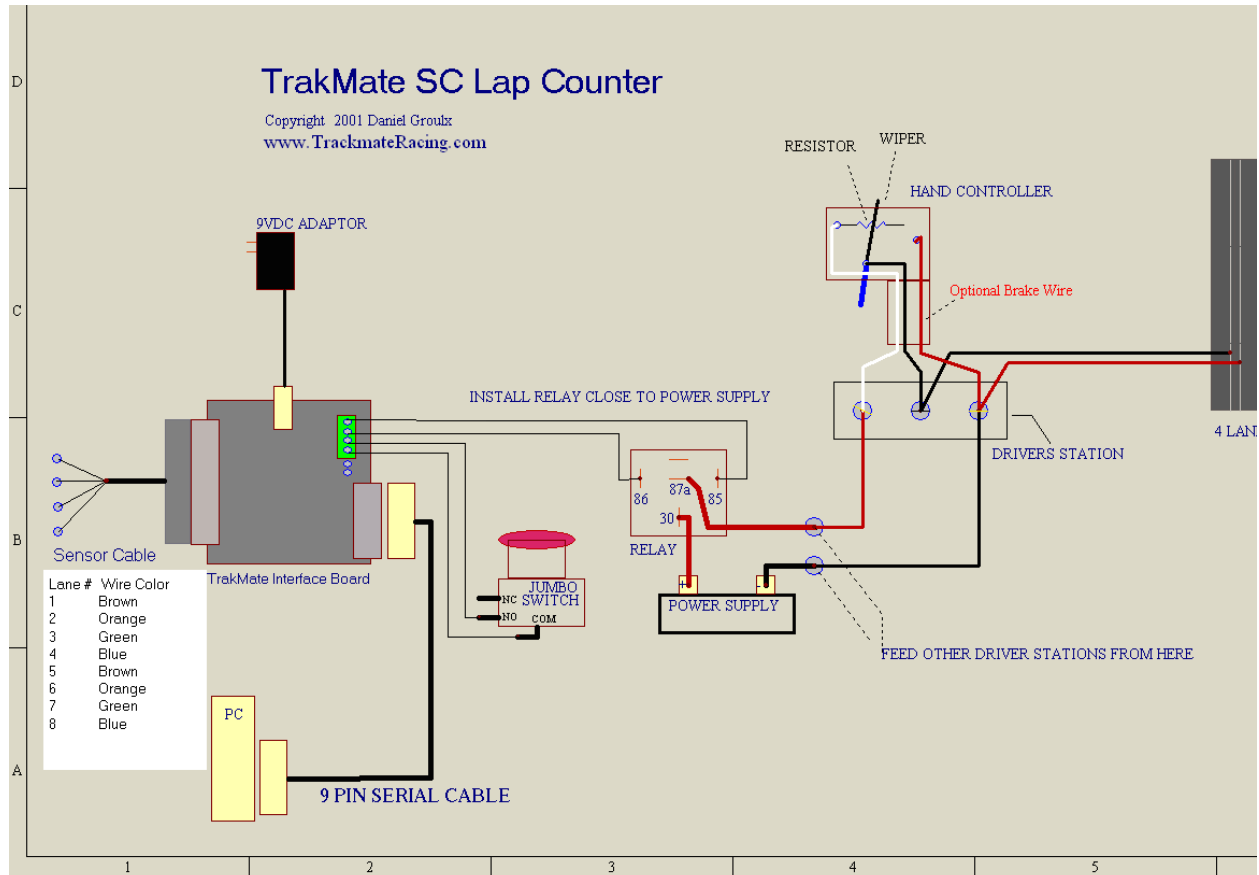

Installing more than one track call button:
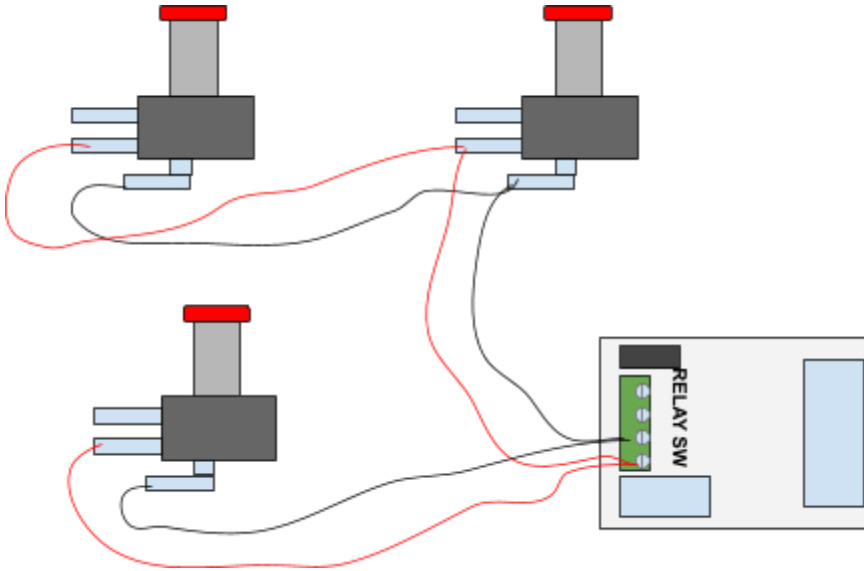
There are two ways of wiring multiple switches. Run the wires from each switch back to the interface or wire from switch to switch or you can do a combination of both as shown in the diagram.   Your board may not be exactly the same, **make sure to use connections marked SW**.

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.

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

Installing Interface Old Version

TrakMate SC Lap Counter

Copyright 2001 Daniel Groulx
www.TrackmateRacing.com

9VDC ADAPTOR

RESISTOR   WIPER

HAND CONTROLLER

Optional Brake Wire

INSTALL RELAY CLOSE TO POWER SUPPLY

4 LANE

DRIVERS STATION

Sensor Cable

Lane #	Wire Color
1	Brown
2	Orange
3	Green
4	Blue
5	Brown
6	Orange
7	Green
8	Blue

TrakMate Interface Board

86   87a   85

30

RELAY

JUMBO SWITCH
NC
NO   COM

POWER SUPPLY

FEED OTHER DRIVER STATIONS FROM HERE

PC

9 PIN SERIAL CABLE

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 easy steps of installing the sensors and achieve perfect vertical installation and easy removal from the track. Shown is a Ninco track but the same technique can be used for all plastic tracks.

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

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

Installing LED Bridge/Gantry for infrared system

The LEDs mounted in the bridge provide a light source to the sensors in the track.

Note: These LEDs are infrared and invisible to the human eye. Placed over the track, the alignment of the LED does not need to be accurate. Upgraded current LEDs now allow alignment to be off by 1/2 inch (12mm).

Caution: Never attempt to move LEDs; installing LEDs in a different location will 'break' the series circuit.

Custom bridges are also available. Check out at:.........

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...

Note: The power 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.

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

Installing Reed Switches

Reed switches are small switches activated by the slot cars magnet and recommended for HO slot cars only.
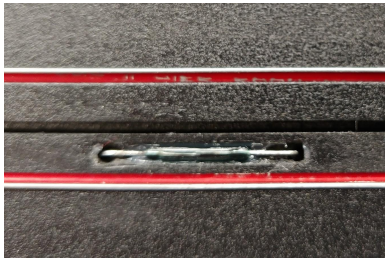
Underside of an HO track.

Notice placement of the reed switch is in between the rail and the slot. You may use hot glue to hold it in place.

You can also order replacement reed switches at: www.TrackmateRacing.com

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

Installing Dead Strip

Important: For deadstrip you must change sensor type in the settings.
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

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:
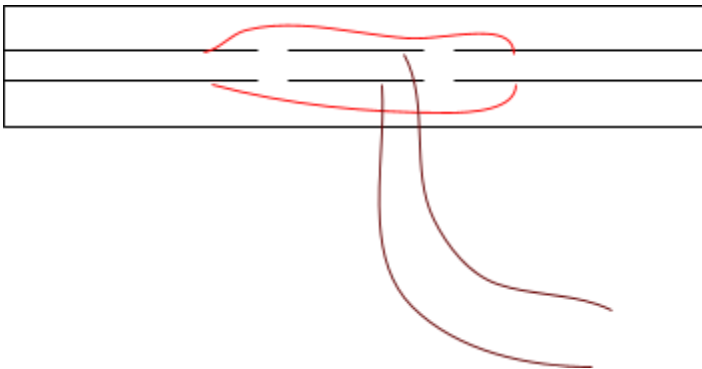
The dead strip works properly in one direction only. If you run your cars in both directions you will need to switch the wires around on the dead strip when you switch directions.
There is also an optional bi-directional dead strip that has switches for each direction.
For proper operation the WHITE wire connects to the dead strip's 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
Pin Out Bottom View
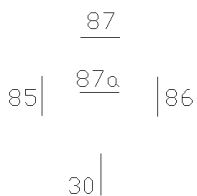
1. Run two Wires from 85 and 86 to the two terminal screws marked RELAY
2. Remove Power Wire from track power supply + Terminal
3. Connect this end to 87a of Relay
4. Add wire between 30 and power supply + Terminal
Note:
Connect the two outer connections labelled relay to the relay coil pins 85 and 86 on an automotive relay.
Important:
    a. Verifying voltage via the top screws is not reliable if the screws are not tightened.
    b. 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 to 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.

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

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 names here will appear in printouts

Note: 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.

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#

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 and you can select which sound to enable or disable. Click on *setting->sound* to access this form. Clicking the test button allows you 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 then select them from this screen.

Track Power

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.

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.

Instant Restart: Check this box if you want instant restart with no count down after a track call.

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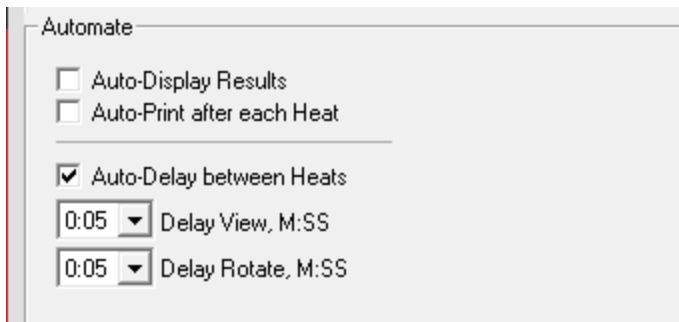
A very liked feature is the automated rotation. This allows you to run a complete race with up to 60 racers without having to touch the computer. Another huge advantage is the race is completed in a much shorter time as racers know their time is limited between heats.

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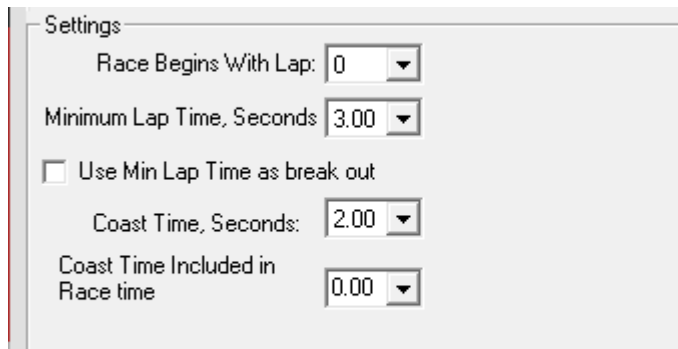
Race Begins With Lap 0,1
Race begins with laps 0 recommended. Place the car before the bridge; first time it crosses sensor it will count as lap 0, next time around will be a complete lap and count as lap 1.

Minimum Lap Time
Set this below the best possible lap time. This feature is useful in avoiding invalid lap times caused by slot cars accidently 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 i.e. 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* .
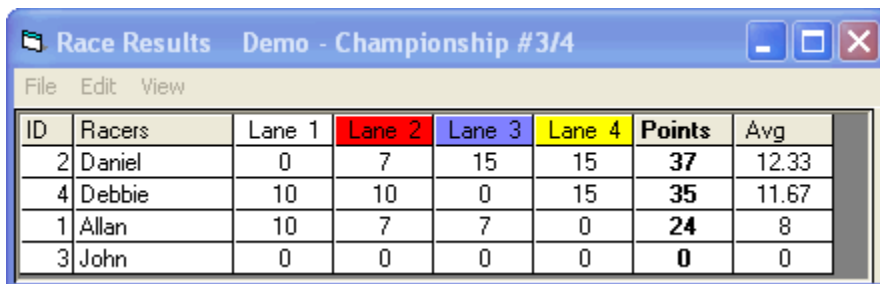
Timed Races
Race ends after time ends and all cars finish their current lap. If a car takes too long to complete the current lap it will time out and end the race.

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 then 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 then the number of lanes uses the Round Robin race format. You can also have rotation completely automated to auto start next heat. See Automation section.

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. Here is 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	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

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 and 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

Race Format

Race Format:
Qualify Timed

Number of Minutes 0.25
Qualify Lane 1

Rotation and Round Robin Races
- ● Straight: 1234
- ○ European: 1342
- ○ Custom: 123

Repeat Lane 1
Repeat Track 1

Championship Point System

Select Racers

OK   Cancel

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 example: 2015 nov 9 at 21:06

Race

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

Click File>load Qualifiers. Go to the correct directory (it should remember next time) and select file. Qualifiers will appear with the qualifying position number in the 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 want 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 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

1) In the trackmate software click Help > Install USB driver then click install USB driver window 7,8,10
2) unplug USB cable and plug it back in
3) restart Trackmate software
4) Go to Settings > Installation settings   Click Autoset com port

You should be good to go
Don't extend the USB cable, only use the one provided.

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. **Note:** 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 350mA 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 select the dead strip version in settings.
Caution: 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. It is recommended to use the USB to serial converter that Trackmate carries and will not have this issue.
Note: 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 minimum 350mA or higher, 2.1mm plug and center negative.

Software Updates

Download the latest version from the website.
Register your email at www.trackmateRacing.com to receive the latest updates.

Trackmate Products

Other Interesting Products from Trackmate Racing
- Power Supplies
- Slot car driver stations
- Slot car mini relay panel
- Slot car controllers
- Drag Racing Timing for slot cars, R/C cars, Cars, ATVs etc.
- RC transponders / Lap Counters (for radio controlled cars)
- Sports Timers
- Custom Timing Solutions

For more information on these products, visit www.TrackmateRacing.com

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