

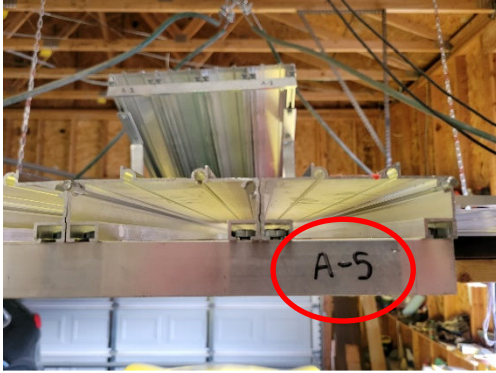
Track Setup



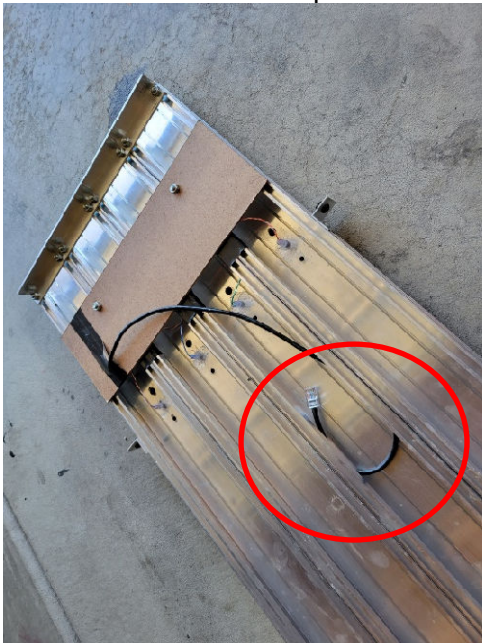
- 1 – Clamps (Bar and C)
- 2 – USB Extender
- 3 – Starting Switch Cable
- 4 – Tape, Tools, Spare Parts
- 5 – USB Connector
- 6 – Timer Power Supply
- 7 – Power Strip
- 8 – Speaker Cable
- 9 – Speaker Power Supply

Track Setup

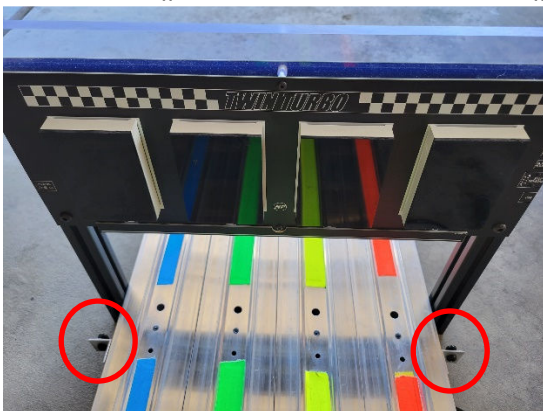
1. Start with track piece A-5 (Track pieces are marked on the ends of the track). Place the track piece face side down and find the cable that is tucked into the rails of the track.



2. Loosen the cable and flip the track so that the cable is on the side with the orange tape.

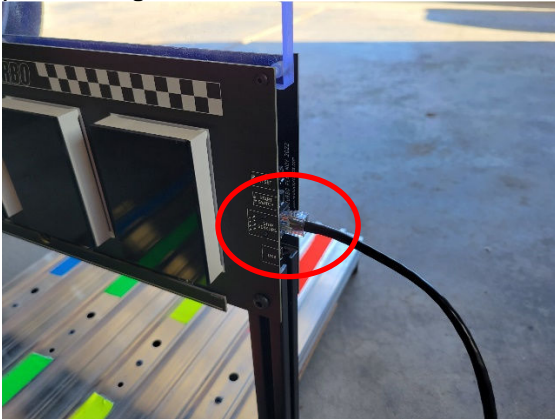


3. Find the timer and set it near the track (be careful not to let it fall over). Loosen the Allen screws and set the timer over the oval nuts on the other side of the mounting bracket. Ensure that #1 is over the Blue lane and #4 is over the Orange lane.

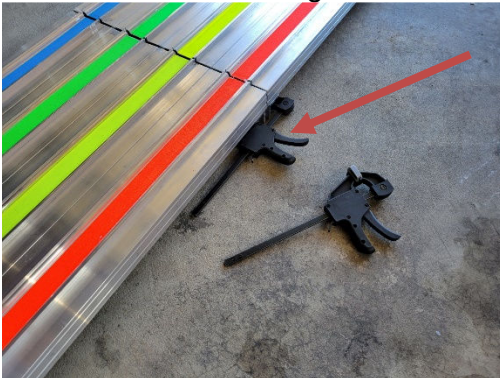


Track Setup

4. Tighten the Allen screws (from above image) so they are snug and hold the timer in place. Plug the CAT5 cable into the timer on the right side of the track (Stop Sensors).



5. Assemble track pieces A4, A3, and A2 by using Bar Clamps to hold the pieces together. Then attach piece A6 (stopping pad) to the end of the track after A5. The stopping pad will sit lower than the regular track, this is by design.



Track Setup

6. Prepare track piece A-1 by assembling the legs and the base. Loosen the nuts and bolts on the legs and lift both the base and the legs until the holes match up. Secure the legs to the base on both sides of the track by finger tightening the nuts on the bolts.



7. Carefully turn track A-1 over and set in place connecting to the curved piece A-2. Use the C-Clamps to keep the pieces together. These clamps should be tight, but do NOT overtighten the C-Clamps to avoid damage to the track.



Track Setup

- Adjust the starting lever by lifting up on the handle and pushing the notched side down into position. The drop gate can simultaneously be lifted up into the notch.



- Connect the Starting Switch Cable and the USB Cable on the right side of the timer. Run the Starting Switch Cable down the side of the track and connect it under the starting gate.



Track Setup

10. Depending on where you want to set up the laptop, you may want to add the USB extender between the USB cable and the laptop. This part is optional but will allow you to run the race from a greater distance if desired.

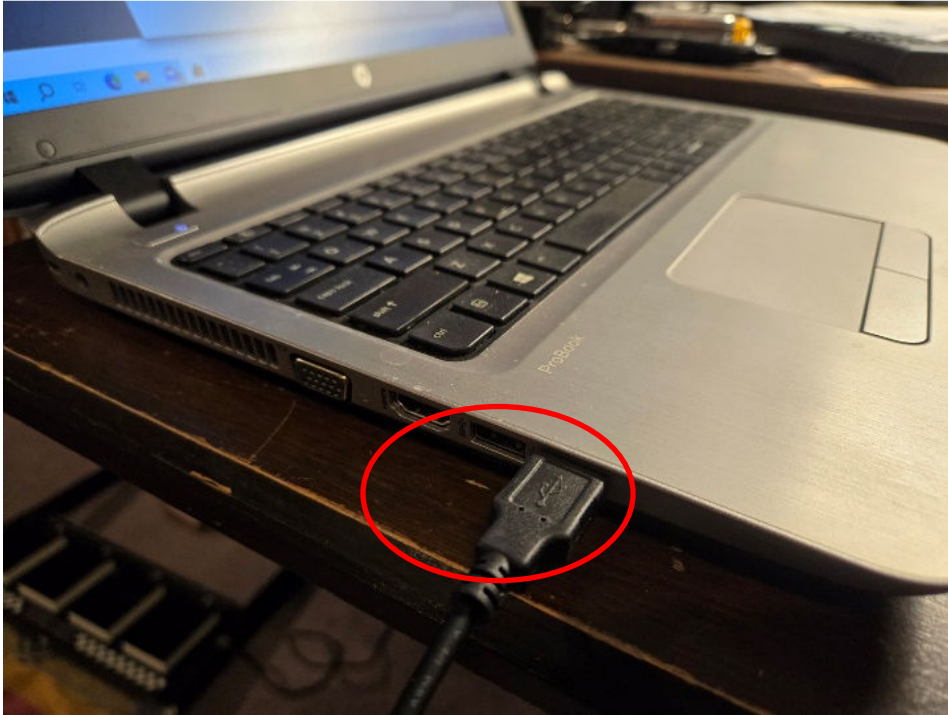


11. Connect the Timer Power Supply to the Timer on the left side and plug it into the Power Strip with or without an extension cord. Once power has been activated, the numbers on the timer will light up and start counting. Once completed, the top of the timer should turn to a yellow color indicating that the timer is ready.



Track Setup

12. Plug the USB end into the laptop. The USB must go into COM3 in the laptop. This is achieved by plugging into the port on the left side of the laptop, closest to the user.



Computer Setup

Plug in the power adapter to the laptop and turn on the laptop.

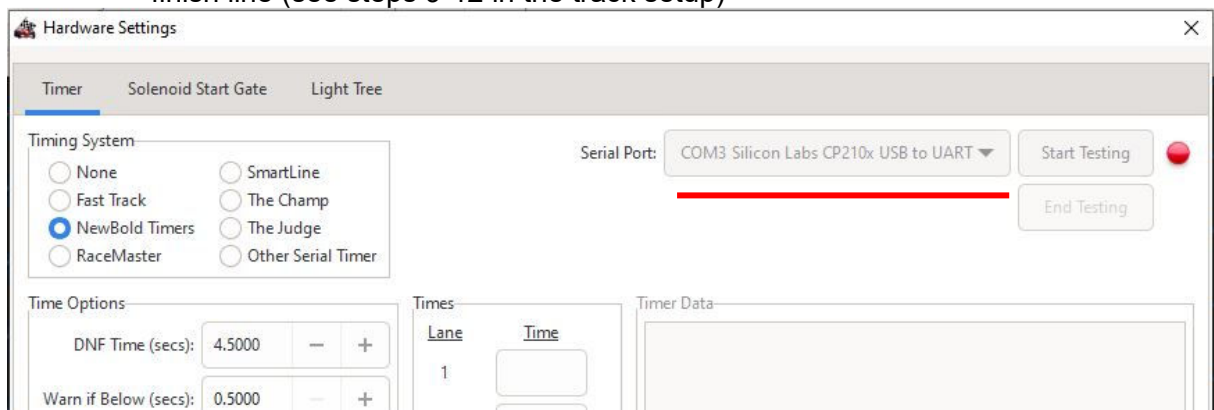
Launch GrandPrix Race Manager.

Below is a brief explanation of which steps need to be followed and how to proceed with the race setup.

Step	Completed	Shortcut	Step	Completed	Shortcut
1 Create a Race Data File	<input checked="" type="checkbox"/>		6 Define Awards (Optional)	<input type="checkbox"/>	
2 Software Settings	<input checked="" type="checkbox"/>		7 Register Racers	<input checked="" type="checkbox"/>	
3 Report Settings	<input type="checkbox"/>		8 Create Race Schedules	<input checked="" type="checkbox"/>	
4 Hardware Settings	<input checked="" type="checkbox"/>		9 Run the Race	<input checked="" type="checkbox"/>	
5 Define Competition Groups	<input checked="" type="checkbox"/>		10 Awards Ceremony (Optional)	<input type="checkbox"/>	

Tutorial Videos

1. Create a race file (or open an existing file if one has already been created). The file can be created pretty much anywhere on the hard drive, but I would suggest using "C:\Pinewood Derby\Races". Give the new file a name to complete this part of the setup.
2. Most Software Settings can remain as they are. The only setting that really needs to be adjusted is if you are racing with Sub-Groups. If so, go to the Standings tab, and check the box to "Enable Subgroups".
3. You will not need to do anything with the report settings, so please skip this step.
4. Hardware Settings require that you test the communication between the laptop and the track.
 - a. Open the hardware testing and ensure that the Serial Port is "COM3 Silicon Labs CP210x USB to UART". If not, check the USB port and ensure you are connected to the finish line (see steps 9-12 in the track setup)



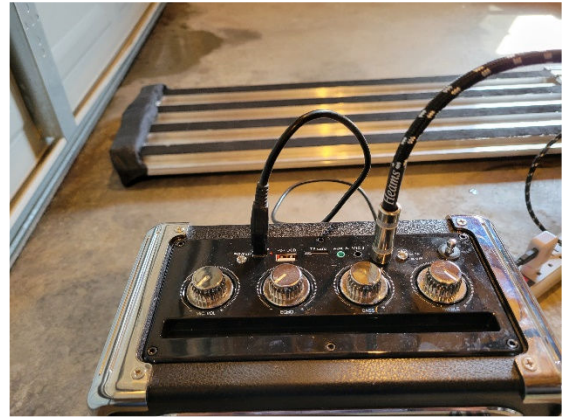
Computer Setup

- b. Click the button to “Start Testing”. There will be two message prompts and you will need to click “OK” to both. If you receive an “Error” message, or a message that says you are not connected, you will need to review steps 9-12 of the Track Setup.
 - c. Be sure to click “End Testing” and then “Close” for the setup to be successful.
5. Define Competition Groups is where you decide what groups (and / or subgroups) will be competing. You must create at least one group. This is for more advanced users and in most cases, I will have set this up for you already.
6. Skip the section to define awards, this does not need to be completed.
7. Registering Racers can only be done once the Competition Group has been created. Add racers by clicking the “+” sign at the top of the screen. Enter the racers that will be participating in the race.
 - a. You must have a first and last name for all racers. I usually use first name and last initial for privacy reasons.
 - b. Each racer will need to have a distinct car number as well.
 - c. You will need to “Pass” all racers that will be racing, and you can delete racers by selecting the line and clicking on the trash can.
 - d. Double click any line to edit racer information.
8. After all racers have been entered and have “Passed”, create a race schedule for the race. Smaller groups could race 2 times per lane, while larger groups would likely only race 1 time per lane.
9. Finally, you are ready to Run the Race.
 - a. When you have selected your race group, you will see the 1st heat. Before any races begin, be sure to do the following:
 - i. Click on the “Ready Timer” button in the bottom left area of the screen. The entire section (bottom left corner) will turn yellow, and the button will say “Ready”.
 - ii. Ensure that the finish line is yellow.
 - b. Begin your race by pulling the starting lever towards the back of the track. Be careful not to bump the car in lane 4 when doing so.
 - i. The light on the finish line will turn green, and places will be shown as cars cross the finish line.
 - ii. When all cars have crossed, the top of the finish line will be white and race results will be displayed on the screen.
 - c. The race software will cycle to the next race in 10 second intervals until all racing is complete.
 - i. In the even that you need to re-run a heat, you will need do the following:
 1. Click “Close” on the race screen.
 2. Re-launch the Racing module.
 3. Click the minus sign (-) to go back to the previous heat.
 4. Click “Re-run Race”.
 5. Continue with your racing.
10. When all racing is complete, close the racing window and click on the Overview tab. Then click on the Awards Ceremony. From here you will be able to determine how many places you want to show, and then reveal them one by one all the way up to 1st place.

See the Tutorial Videos or the application help section with other questions about GrandPrix Race Manager.

Other Setup Items

1. The cordless microphone can be used by connecting the ¼ inch cable from the microphone base to the input on the speaker. Plug the microphone base into the power strip, and the speaker is powered by the USB power supply.



2. Use the VGA cord to connect the laptop to the Projector and display the results on a screen, whiteboard or lightly colored wall.