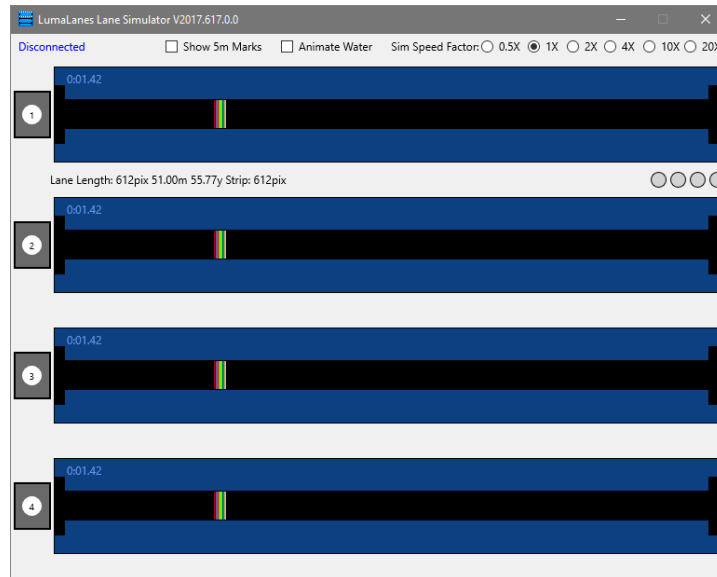
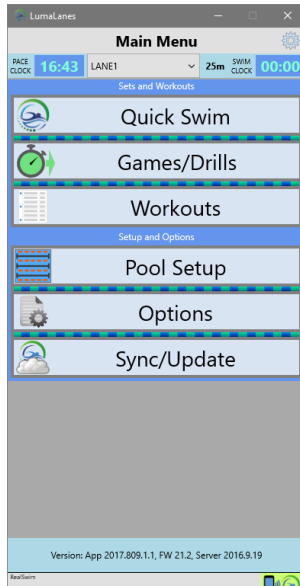




PC Software User Manual

Revision 2020.1.11



INTRODUCTION

This manual describes how to set up and use the LumaLanes **Lane Simulator** and **SwimPacer** software on a PC (Windows or Mac). The Swim Pacer software can be operated on a PC, allowing you to see the results on the Lane simulator, also running on the same PC. This combination of software packages is normally used as a training tool. I also provides a simple means to create “workouts” for the team in an off-line mode, then to transfer those via the cloud to your mobile app for use at the pool.

This manual only describes how to setup those software packages. For detailed information on using the SwimPacer software, see the separate LumaLanes **SwimPacer User Manual**. Contact LumaLanes if you need a copy.

OVERVIEW

The basic procedure for setting up and using the LumaLanes PC software is:

1. Download and install the both software packages on your PC.
2. Run the **Lane Simulator** software.
3. Run the **SwimPacer** software.
4. Use the SwimPacer software just as you would on your mobile device at the pool, but instead of controlling light strips connected to the control box, you will be controlling the simulated light strips in the Lane Simulator.

These steps are described in detail below.



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INSTALLING THE SOFTWARE

Windows PC Setup

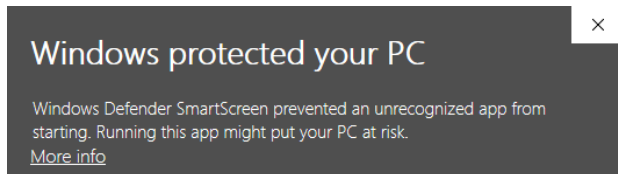
Compatibility

The Windows version of the Lane Simulator and SwimPacer software will run on Windows 7 or newer.

Installing On Windows

The software is available from the LumaLanes technical support website at <http://lumalanes.com>. Go to the **Support** tab, enter the password “swimfast” without the quotes. Look for the link to download the **PC Software and Lane Simulator, Windows Installer**, then **Extract All** to uncompress the downloaded file, and run the extracted installer program **Install LumaLanes**. You may be asked for a password to uncompress the archive – contact support@lumalanes.com if you need the password.

You may see a warning from your virus protection like:



In this case, press “More Info” and “Run Anyway”. Your warning box messages and responses may be different, depending on your virus control and permissions.

This will install the **Lane Simulator**, the Windows version of the **SwimPacer** app, and **PC software User Manual**, and the **SwimPacer User Manual**.

NOTE: *You may be prompted by your system’s firewall or anti-virus software to allow the lane simulator to have network access – you need to allow this in order for the SwimPacer app and the Lane Simulator to communicate with each other; even though they don’t actually connect to the Internet they use the network protocol to “talk” to each other.*



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Mac Setup

Compatibility

Any Mac running OS X 10.9 (Mavericks) or newer.

Installing On OSX

The Lane Simulator and SwimPacer software is available from the LumaLanes technical support website at <http://lumalanes.com>. Go to the **Support** tab, enter the password “swimfast” without the quotes.. There are separate downloads for the Lane Simulator and SwimPacer apps, so be sure to download both and then follow the steps outlined below.

1. Double-click on the downloaded file to uncompress it – you may be asked for a password at this point, contact support@lumalanes.com if you don’t know the password.
2. Double-click on the extracted file (it will be a “disk image” file), and double-clicking on it will “mount” the image so that you can install the software.
3. You should see a window similar to this:



Drag the icon as indicated to copy the software to your Applications folder. You can now use the Finder to browse to your Applications folder and run the software like any other app.

4. You can now eject (or “unmount”) the disk image you opened in step 2 and delete the disk image file (and the originally downloaded zip archive) if you want.
5. **You need to repeat steps 1-4 for BOTH the SwimPacer and Lane Simulator software.**
6. You should also download the **SwimPacer User Manual** from the Manuals and Documents section



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LANE SIMULATOR SOFTWARE

The Lane Simulator software can be used on a Windows or Mac PC for learning to use the SwimPacer app and to visualize how workouts will look at the pool. The Lane Simulator program displays a representation of what the light strips will look like at the pool and can be used to test out workouts and get a feel for how to use the SwimPacer app – the app will look and function almost the same on the PC as it does on your smart phone or tablet. **You will also be able to transfer saved workouts you create on your PC to the SwimPacer app on your phone.**

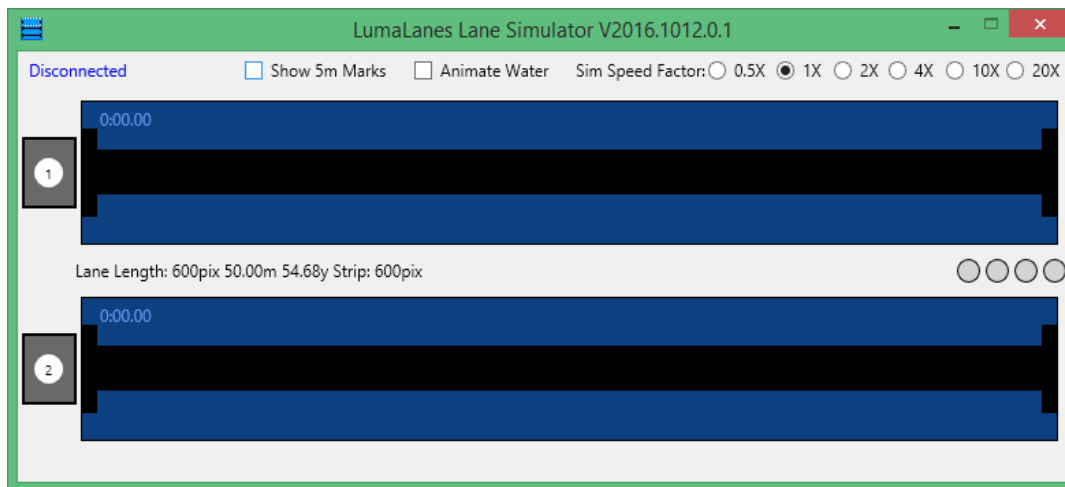
Running the Lane Simulator Software

When you run the Lane Simulator program it will ask you how many lanes to use – you can select any number between 1 and 4. This tells the software how many light strips to simulate.

When you run the SwimPacer or Lane Simulator software, you may be asked to allow the software to have network access – you need to allow this in order for the SwimPacer app and the Lane Simulator to communicate with each other, even though they don't actually need to connect to the Internet.

***NOTE:** The lane simulator software actually runs the same code that runs on the system control box to ensure that it accurately simulates the system (technically, it's actually an 'emulator'). The actual control box has dedicated processors for each lane to ensure that all the code is executed in real-time and that timings are accurate. On the PC, the code is having to share the CPU with the operating system, the user interface, network tasks etc., so the PC may not be able to execute all the light strip control code in real time and may be a bit "jerky" at times. Set the number of lanes to a lower value if your PC is having a hard time keeping up.*

Once it's running, you should see a display similar to this:



User Controls

The “light strips” that are displayed by the lane simulator software are controlled from the SwimPacer application (more on that later), but there are a few controls to change how the simulator looks and behaves:

- ☐ **Show 5m Marks** – check this option to display short vertical lines every 5m down the lane.
- ☐ **Animate Water** – check this option to display a “water ripple” effect in each lane. *Turning this on may slow down your PC if it doesn't have a fast graphics processor.*
- ☐ **Sim Speed Factor** – use this to “time warp” when running a simulated workout to speed up the lights so that you can see what an entire workout looks like in compressed time.



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SWIMPACER SOFTWARE

Normally you will use the SwimPacer app on your phone or mobile device to connect to the control box and control the light strips at the pool. However, the app can be used on PCs running Windows and macOS (OSX) to control the simulated light strips in the Lane Simulator program. This is a great way to learn to use the system, since the SwimPacer app looks and behaves the same on all platforms. It is also useful for testing out workouts to make sure that there aren't any issues with swimmer spacing. For example, sometimes if swimmers aren't spaced out properly you can have swimmers ending a set just as the lead swimmers are starting a new set – the system will handle this properly, but it can be confusing for the swimmers as there can be lots of lights moving in different directions!

Running the SwimPacer Software

Make sure the Lane Simulator software is running first – otherwise the SwimPacer app will display a warning dialog about “Lane initialization failed”. You can use the SwimPacer app without the Lane Simulator to create and edit workouts.

If the Lane Simulator software is already running, then when you start the SwimPacer software on the PC it should connect to the Lane Simulator and you'll see the word “Connected” displayed in the upper-left corner of the Lane Simulator window.

For detailed instructions on using the SwimPacer software, see the separate SwimPacer User Manual. Contact LumaLanes if you need a copy.

Once it's connected to the Lane Simulator software, the SwimPacer software functions just like the mobile application does when connected to the control box. You can run workouts, use the Games/Drills page, change lane lengths etc.

A great place to start is the Quick Swim button on the Swim Pacer app. Use the Start and Pause buttons to see the pacer lights on the simulator, and try adjusting the parameters to get a feel for the controls. It is a good idea to review all the pages of the Swim Pacer User Manual at this point to get familiar with the features and system operation. Have fun!

