

PaceTrainer App User Manual

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Purpose of PaceTrainer App

Idea: Swimmers possess no visualization within the water to determine their speed. Our idea is to create an RGB LED racing light that allows swimmers to control and improve their time. This device increases competitive performance by racing alongside the swimmer.

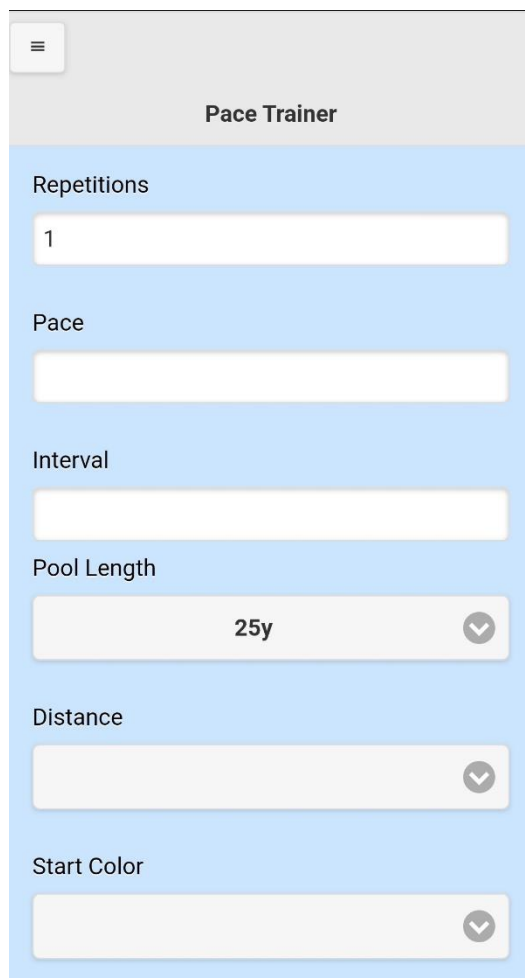
Purpose: The purpose of the PaceTrainer App is to extend flexibility via your mobile device or tablet.

Starting the PaceTrainer App

Prerequisites: Phone Bluetooth must be **turned on**, along with having the Arduino device ready to pair. No other pairable devices should be turned on within the vicinity of the device.

Bluetooth: **Before** entering any of the required fields or selecting a workout, please connect your Bluetooth device to the Arduino. This is required because the data entered will be transmitted to the Arduino via Bluetooth serial. If the Bluetooth refuses to connect, please send us an email via the [Support](#) section.

Page Explanation: [Main Page] The PaceTrainer App is divided into four sections. Opening the app, the main page consists of fields that allow you to choose your workout preferences.



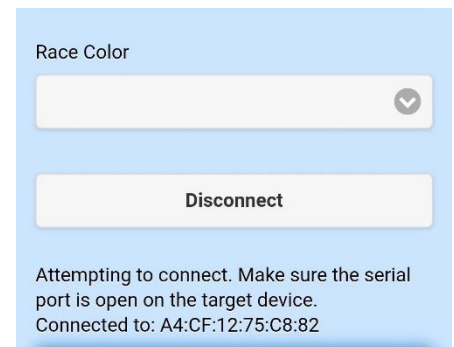
The screenshot shows the 'Pace Trainer' app interface. It has a grey header with a hamburger menu icon and the title 'Pace Trainer'. Below the header is a light blue background with several input fields: 'Repetitions' (text input with '1'), 'Pace' (text input), 'Interval' (text input), 'Pool Length' (dropdown menu showing '25y'), 'Distance' (dropdown menu), and 'Start Color' (dropdown menu). Each dropdown menu has a downward arrow icon.

Main Page

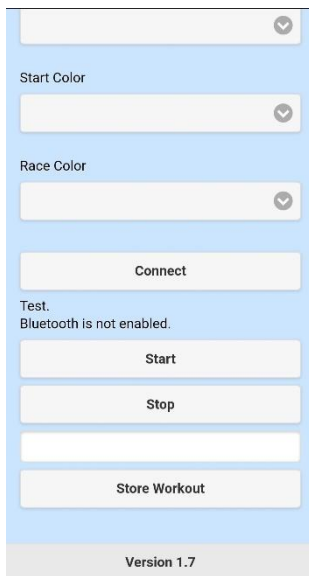
Field	Definition
Repetitions	Enter how many times you wish to repeat the workout : 1 - 999
Pace	Set your time pace mm:ss:ff [minutes : seconds: fractions of seconds]
Interval	Set your time interval mm:ss:ff [minutes : seconds: fractions of seconds]
Pool Length	Choose the length of your pool: 25 yards or 25 meters
Distance	Distance of workout: Dropdown from 25 – 1650 [meters/yards depending on Pool length]
Start Color	Choose the light starting color at the beginning of workout: Red, Blue, Green
Race Color	Choose the light racing color for workout: Red, Blue, Green

Page Explanation: [Bluetooth] Once your devices are in pairing mode, press the connect button pictured in the Start/Stop/Store screen shot. You will see the message “Connected to macAddress” if your Bluetooth device is properly connected.

Page Explanation: [Start/Stop/Store Buttons] Once all your preferences are entered, you have ability to either store the workout, start the workout, or stop the workout. NOTE all fields must be entered for START to work.



Bluetooth

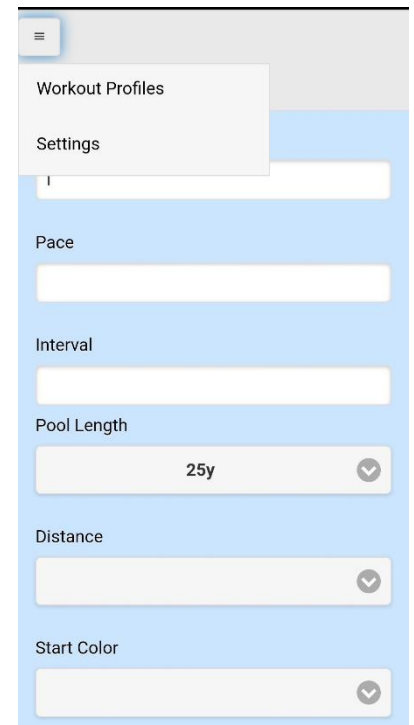


Start/Stop/Store

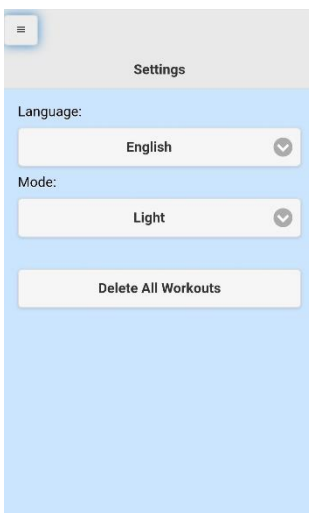
Page Explanation: [Dropdown button] There is a dropdown bar for easy access to your workout profile and settings page.

Page Explanation: [Settings] Change the language, choose a Light or dark mode theme, or choose to delete all your workouts.

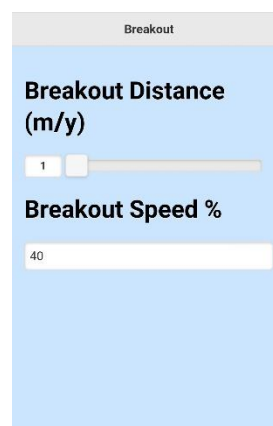
Page Explanation: [Breakout Page] From the main page, you can swipe right to choose your breakout distance. The breakout distance is the distance you emerge out of the water after diving in. You will have to swipe left to go back to main page.



Dropdown

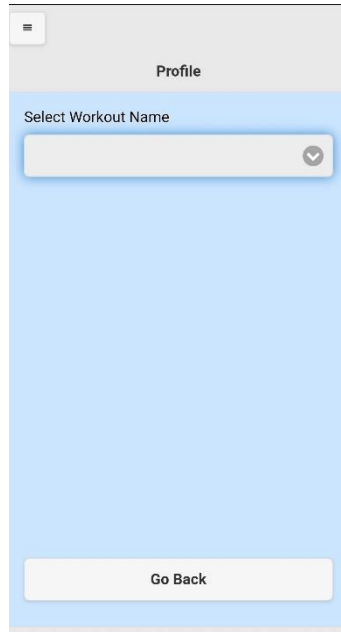


Settings



Breakout

Page Explanation: [User Profile] Using the dropdown button, you can select “Workout Profiles” to choose previous workouts. Once, selected, they will automatically enter the field data. You may go back to the main page by using the dropdown button or the “Go Back” button at the bottom of the page.

A mobile application screen titled "Profile" with a light gray header. Below the header is a blue background area. At the top of the blue area is a label "Select Workout Name" above a white dropdown menu with a downward arrow icon. At the bottom of the blue area is a white button labeled "Go Back".

User Profile

Using the PaceTrainer App

Connect with Bluetooth: As stated in the [Starting the PaceTrainer App](#) you must first connect the Arduino device via Bluetooth. Make sure both devices are suitable for pairing and press the “Connect” button via the main page.

Select Your Profile: Once your phone is connected to Bluetooth, you can either select a previously ran workout or enter new distances for the required fields. Once all your preferences are chosen, press the START button at the bottom of the main page. This will send your personalized workout to the PaceTrainer device.

Adjusting/Deleting Your Workout: If you feel the data you entered is too slow/fast, you can correct your preferences via the main page. The PaceTrainer App allows users to delete their workouts in the SETTINGS page via dropdown button.

Adjusting Your Theme: Currently, the PaceTrainer App has two themes – light and dark mode. Head to the SETTINGS page to change them back and forth!

Adjusting Your Language: Currently, the PaceTrainer App has one other language – Spanish. You can visit the SETTINGS page to change the language.

PaceTrainer App Support

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Note to Users. We hope to implement a time storage option with future releases. Our goal is to encourage competitive competition among schools and athletes. Thank you for downloading!