# Wylas Timing

# Starter Devices Guide

July 2022

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# Wylas Trinity Starter

## Hardware Setup

Turn the Wylas Trinity Starter on, via the power button on the top of the device. The rear display will light up and run through the following stages:

- ○ Connecting WiFi
- ○ Locating Recorder
- ○ Connecting Recorder
- ○ Syncing Clocks

The Trinity will display the information for any readied race. Once a race has been made ready you will be able to use the trigger button to start the race.

# Wylas Trinity Starter

## Reconfiguring the Wylas Trinity

Your Trinity Starter will come configured with the Wylas defaults. This means that it will automatically connect to the Recorder if the default WiFi SSID and password have been used. If they have been changed follow these steps.

### Step 1

Turn the Wylas Trinity Starter on, via the power button on the top of the device.

If the Trinity halts on "Connecting WiFi" then either the WiFi router has not been turned on, or the Trinity does not have the correct WiFi configuration.

Press the "A" button on the rear of the Trinity to show the menu.
Press the "B" to move the menu selection down to "Provision".
Press the "A" button to select the "Provision" menu item.

The provisioning screen will be displayed showing the name of this Trinity device which is also the wifi SSID at which this device can be configured. Leave the Trinity at this screen until you have finished configuration.

### Step 2

Install the Wylas Config application available from Google Play Store onto an Android phone., choose "Provision Trinity (wifi)" and then "Select Device". Select the wifi that starts with "Trinity_" (it will match that on the Trinity LED).

Go back to the WTConfig app  and click on "Connect". The WTConfig app will retrieve the current config from the Trinity. Make any required changes and click on "Save".

The changes will propagate to the Trinity which will then reboot with the new changes applied.

# Wylas Trinity Starter

## General Operation

Turn the Wylas Trinity Starter on, via the power button on the top of the device.

The rear display will light up and run through the following stages:

- Connecting WiFi
- Locating Recorder
- Connecting Rec(order)
- Syncing Clocks

It will then display the information for any race that has been readied.

Use the trigger button to start the race.

By default the fire will only fire if it has a connection to the Recorder and a race is readied. Otherwise it will treat this as a mistake by the starter and vibrate to warn them. The Trinity can be configured to fire regardless of connection and race state via the Restricted Start menu option.

## Rear Buttons

The "A" button is used to select an item. Pressing it from the main screen will display the Trinity Menu.

The "B" button is used to iterate through items on the screen. The current item is denoted by a trailing asterix. Once you have moved down to the required item, use the "A" button to select it.

## Menu

The Trinity Menu consists of the following options:
- Battery
- Connect Bluetooth
- Upgrade App
- Restricted(ed) Start
- Exit

These will be described on the next page.

# Wylas Trinity Starter

## Menu - Battery

The Battery screen shows information about the current state of the battery.

## Menu - Connect Bluetooth

Selecting the Connect Bluetooth menu item shows the Connect Bluetooth screen containing the name of the Trinity Starter (eg Trinity-527).

It also causes the Trinity to start advertising a Bluetooth server that can be connected to from the Wylas Starter Android app in order to configure the Trinity Starter. See "Setting up Wylas Trinity".

## Menu - Upgrade App

Selecting the Upgrade App menu item shows the Upgrade screen containing the installed version of the Trinity app as well as the version available on the Recorder.

You can choose to either update the app or exit.

## Menu - Restricted Start

The Restricted Start menu item shows the current state of the option, either ON or OFF. Selecting the item will toggle between those values.

Restricted Start refers to whether the Trinity should be restricted to only starting when it has both a connection to the Recorder AND the race is readied. This is the default behaviour.

## Menu - Exit

Selecting the Exit menu item exist the menu system.

# Wylas Android Starter

# Hardware Configuration

Android hardware/firmware varies between manufacturer. To ensure good performance of your timing system these are the settings we recommend:

- Turn on flight mode. This will stop the battery being drained by the cell radio.
- Turn the screen brightness down to 30% or less, and turn off auto brightness. Screen brightness has a large impact on battery life.

# Wylas Android Starter

## Installing the Wylas Starter App

<span style="color:red">If you have purchased a timing system from us you don't need to perform these steps as the app will be pre-installed on your devices.</span>

Install the Starter Android application to the Android device (must be a minimum of Android 4.0), downloadable from the Google Play Store.

### Step 1

Click on **WT WStarter** icon to start the application. The Starter will try to automatically find and connect to the Recorder, after which you'll see a screen like the one on the right.

### Step 2

The blue wi-fi icon 📶 indicates that you have a connection to the Recorder Server. Pressing on it will disconnect the Starter from the Recorder.
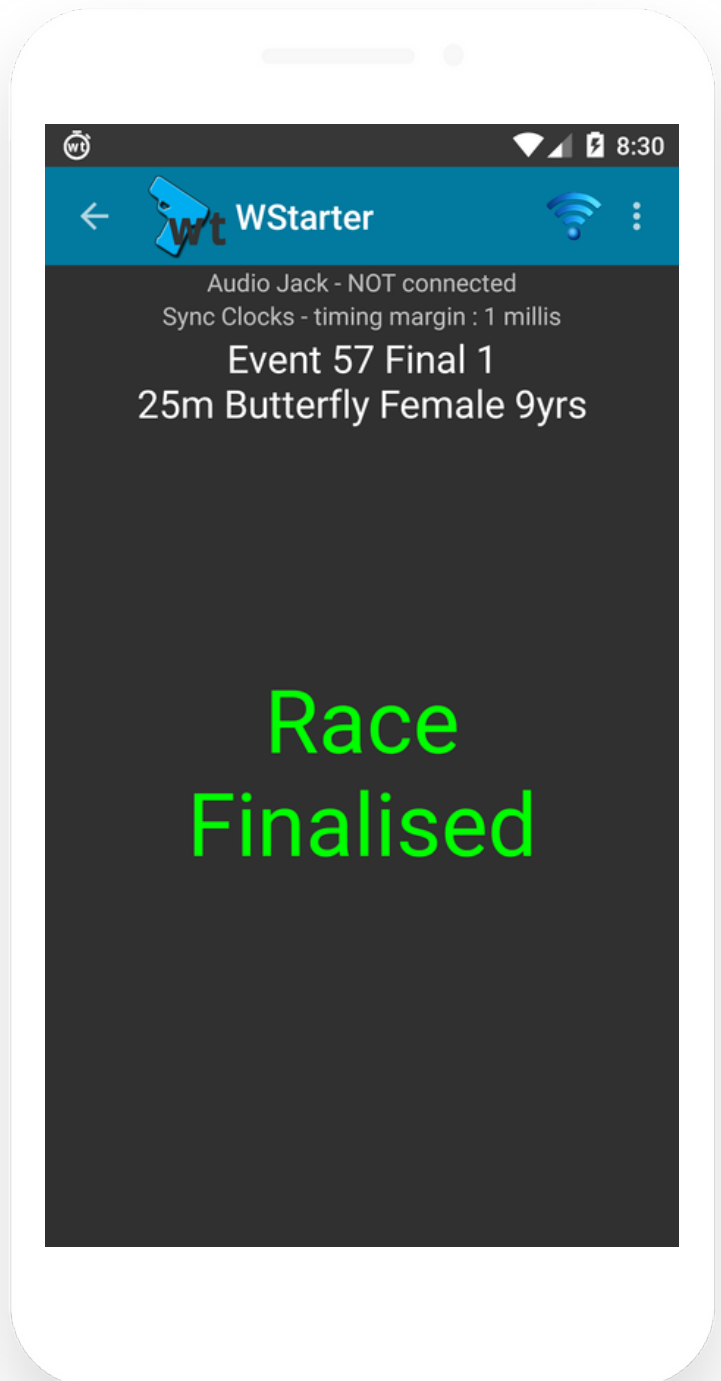
### Step 3

The icon 📶 will appear grey when the Starter is disconnected from the Server. Clicking on it when disconnected will connect to the Recorder server.

### Step 4

The state of the audio jack is also displayed. The Starter can be configured (via Settings) to accept a start signal sent through the device audio jack. This enables you to connect an existing electronic starter to the Wylas Timing Starter to start the race.

### Step 5

You will also see that the Starter has synchronised its clock with the Recorder and has a margin of 1 millisecond.



WStarter

Audio Jack - NOT connected
Sync Clocks - timing margin : 1 millis

Event 57 Final 1
25m Butterfly Female 9yrs

Race Finalised

# Wylas Android Starter

## Starter Settings

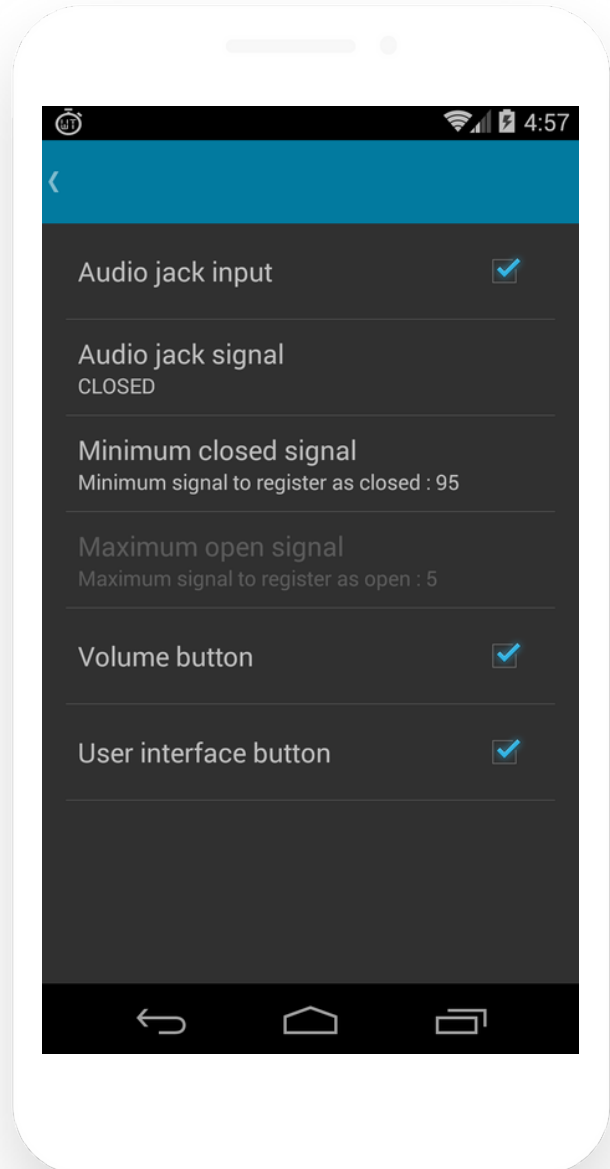The vertical ellipsis in the top right is the overflow menu. Clicking on it provides options like Settings.

Input Settings lets you choose how you would like to be able to start a race.
There are three options:
• **Audio jack input** from the output of a Starting Pistol
• **Volume rocker** is a click on either the volume up or down rockers
• User interface button is the soft Start Race button.

The audio jack is the preferred option as this means when the Starting Pistol
fires, the race will be automatically started.

The Starter must be connected to the Starting Pistol using a TS to TRRS
headphone adapter cable. The microphone adapter section of a PC headset adapter provides the same capability, so if you cannot find a TS to TRRS adapter then you can use this instead.

The Starter can be configured to accept either OPEN or CLOSED circuits. It listens to the microphone channel for a signal that exceeds the configured volume. The documentation for your Starting Pistol will provide the appropriate information. The one most commonly supported by Starting Pistols is CLOSED which is the default.

If you don't have a Starting Pistol with an electronic output then don't despair, you can still use the Wylas Timing system to automatically start your races. You will just need someone to manually start the race via the User interface button or the volume buttons on the Starter app or via the Recorder application.

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# Wylas Android Starter
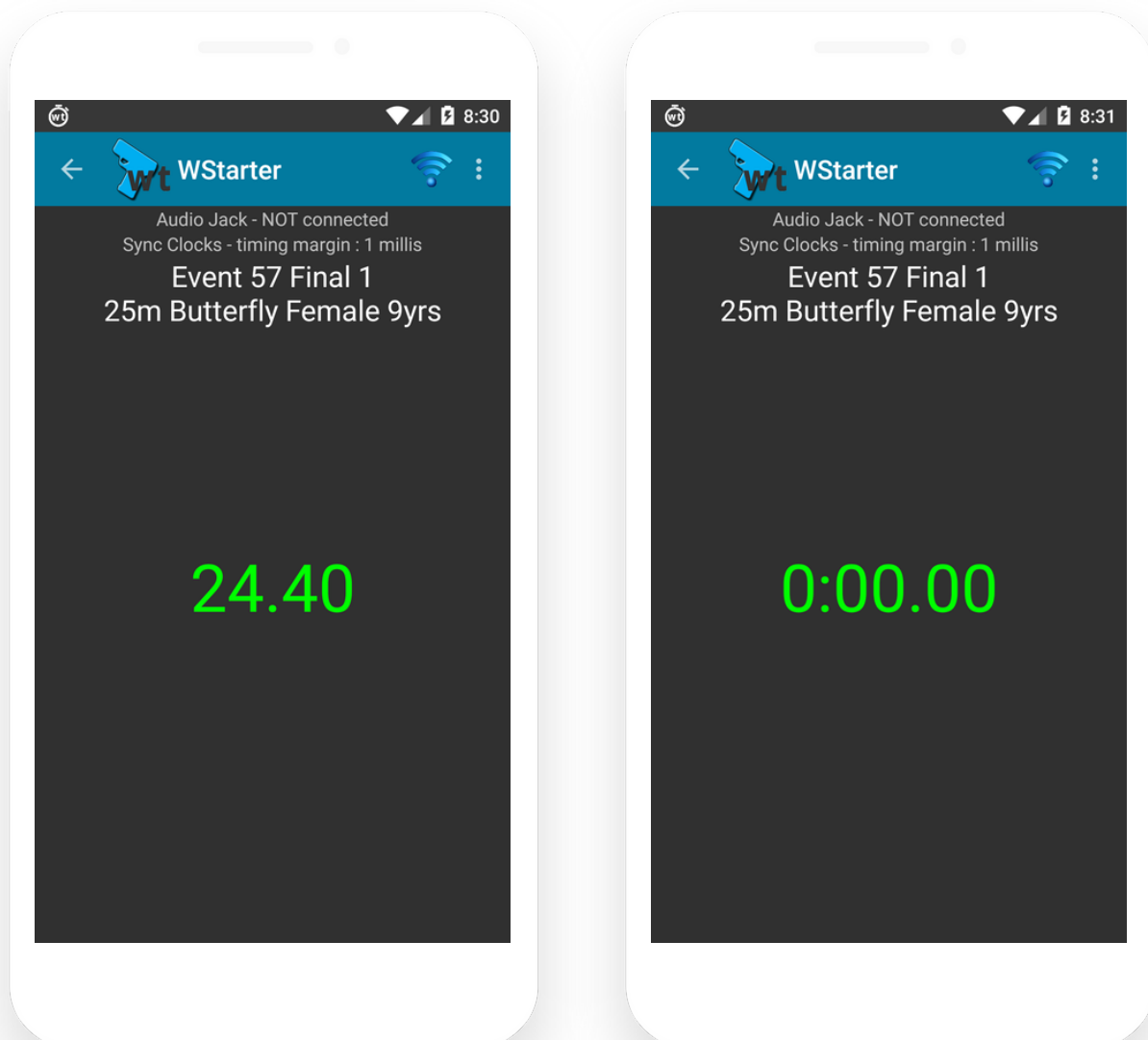
## Starting a Race

When a race is readied, the details of the race will be displayed on the Starter. The **Start Race** button will be enabled if the User interface button settings is checked.

The race may now be started using any of the starting options that have been configured. Once started, the Starter will display a running clock of the elapsed time.

Subsequent fires of the starting pistol or the volume button will have no effect until the Recorder has readied a new race.

When the Recorder finalises a race, the user interface of the Starter will be updated to reflect that.

As soon as the Recorder marshals the next race, you are free to start it.

# Customer Support

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**Wylas Timing**