

SOA Start Clocks

Quick Guide

- Place the Start Clock at the start.
- Place the Pre Start Clock at pre Start
- Connect the two displays with the data cable. Note that the plug only goes one way – don't force it. The plug has a locking screw cover for security - screw this up.
- Turn on the Start Clock. Turn on the Pre Start clock. ON is the left position.

Later:

- Turn off the displays and return the clocks so they can be re charged.
- Each display has a charger, the charger connects to the socket, the switch must be in the **OFF** position for the charger to operate. Charger light is off when charging then comes back on when battery is charged.

Longer Guide

Each Clock has a Master and Slave Display. The Master Clock has an accurate 'Real Time Clock' and will display real time. The slave is controlled by the Master Clock and will display the Call Up or Pre Start Time. By default the Pre Start is set to -3. The displays are Red LEDs showing Hours Minutes and Seconds e.g. 12.35.22

The Master clock will give a warning 'beep' at 50 and a count down 'beep' at 57 , 58 and 59 seconds then a start BEEP each minute.

The clocks are probably best placed off the ground on a small table or stand. Place the Master Clock near to the start line where it can be seen by starters and Start officials.

Place the Slave Clock by the Pre start where it can be seen by waiting competitors and Pre Start officials. Connect the master to the slave with the signal cable – the sockets can only fit one way into the plugs. Turn on the Master and Slave displays by pressing the switch down.

Following a self test the start and pre start times will show. TMR shows at bottom right of the LCD screen. The Real Time Clock will be updated by the GPS unit shortly after being turned on. The display freezes during the update. Once a GPS time is available the clock is synchronised to the GPS time pulse. GPS shows at bottom right of the LCD screen. If the clock does not start within a minute turn off and turn on again. The screen also confirms DST (Daylight Saving Time) and the Time Zone.

The Pre Start delay can be adjusted from 9 to 0. The buzzer can be turned on or off.

With no buzzer and Pre Start of zero both displays will show race time and the displays can be set up at the finish so finishers can see their finish time.

The clock can be adjusted for Summer Time (DST) and a Time Zone

The displays have rechargeable Sealed Lead Acid batteries which should last for 7 hours use. The batteries will need to be recharged before the next use. The charger fits to the signal plug. To charge the batteries place the switch in the off position. Charger Light is off whilst charging then on when complete.

For help or support contact Ted Finch ted@finchhouse.org or call -7980 010924

Adjusting the Clock settings

The Master Clock has a LCD Display and key pad. On the key pad use UP (2), DOWN (0), STAR(*) and OK (#) keys .

UP and **DOWN** will scroll through the menu options. **OK** will select a Menu Options
UP and **DOWN** can then be used to adjust values e.g. adjust Pre Start delay,

First or Top Screen shows (typical)

Start	Call Up
12:34:56	12:37:56
TZ Offset 00:00	GPS

Press **Down** Key to Buzzer Screen

Buzzer Screen

Buzzer is ON
Buzzer Set OK
GPS

Press **OK** to go to Buzzer Setting Screen.
Press **Down** to Go to Pre Start Screen

Buzzer Setting Screen

Buzzer is ON
Off, On, 30s U/D
OK = Done
GPS

Use **Up** or **Down** to change Buzzer setting.
Off is Off, On gives Start every Minute, 30s Gives Start every 30 seconds.
Press **OK** to return to Buzzer Screen

Pre Start Screen

Set Pre Start OK
Delay - 00 Mins
GPS

Press **OK** to go to PreStart Setting Screen.
Press **Down** to Go to **DST** Screen.

PreStart Setting Screen

Set Pre Start U/D
Delay - 00 Mins
OK = Done
GPS

Use **UP** or **DOWN** to adjust the Pre Start in the range 0 – 9 minutes.

DST Screen

```
DST is    ON
* = Off

GPS
```

Press * to toggle Summer Time / DST On or Off
Press **Down** to Go to **Time Adjust** Screen

Time Adjust Screen

```
Time Adjust OK

12:34:56

TMR
```

OK(#) to enter Time adjust mode

```
Hours U/D OK=Mins

12:34:56
* = Done TMR
```

Use **UP**(2) or **Down**(0) to change Hours.
Use **OK**(#) to move to Minutes.
Use * to Finish

```
Mins U/D OK=Secs

12:34:56
* = Done TMR
```

Use **UP**(2) or **Down**(0) to change Minutes.
Use **OK** to move to Seconds.
Use * to Finish

```
Secs OK=00

12:34:56
* = Done TMR
```

Use **UP**(2) or **Down**(0) to change Seconds.
Use **OK**(#) to Zero Seconds when synchronising to another clock.
Use * to Finish

(To re synchronise with GPS time press OK(#))
(Sync GPS Press *)
(Press # when done)

For help or support contact Ted Finch ted@finchhouse.org or
use the contact form at www.finchhouse.org - Clock Project - Feedback Form