

## **Specification and Instructions for:-**

### **“BLUETOOTH” CONTROLLED T.O.D/PACE CLOCK**

#### **SPECIFICATION**

- Operating Voltage, 12VDC @ 600ma, Mains PSU included.
- Typical Control Range, 40metres depending on device used.
- Pace Clock Accuracy,  $\pm 0.1\%$  per full cycle.
- Time of Day Accuracy, as per Phone Network.
- Control System,  $\mu$ -processor.
- Hand Driver, 4 phase Stepper motor.
- Integrated programmable “Timing/Event” function and audible warning.
- Clock size, 850mm Dia, with 4 X 140mm 7 segment digits.

#### **DESCRIPTION**

This multi-function Clock has been designed for Indoor use and requires a 240VAC supply adjacent to its location.

It will display the “Local” Time-of-Day (Hours & Minutes, 24hr format) wherever used globally, once connected to a suitable “**Android** Smart Phone or Tablet” whereupon it will use the phone network time standard providing precise time accuracy. Custom designed “App” is included as part of the package.

#### **SETTING UP BEFORE USE**

Before fixing the Clock to the wall, insert the 2.1mm DC plug on the end of the lead from the Plug-Top power supply into the Socket located on the base of the control box (rear of Clock) and plug into the mains socket. Switch on the mains supply and the 7-segment display will show “00.00” which is the operating system default; the Sweep hand shaft will rotate once and stop. Adjust the Sweep if necessary by slackening the fixing screw, taking care not to manually turn the brass output shaft. Position the Red tip at “60”; and tighten the screw again taking care not to turn the brass output shaft as this will damage the gearbox within the Stepper motor. It is now ready to locate onto the wall.

## **App Download**

- The associated “Android” application file that provides the operating system for your phone to control the Clock is included as part of the purchase of this product. Contact us on **01788 544839** to receive your free App, quoting your “Packing Note” number and product code.

## **App installation procedure: -**

- Download and install “Pace Clock **SparXv1.4.apk**” from your email inbox into your phone, you will need to allow “installation of applications from unknown sources” to do this, which be found in your applications setting menu; also, make sure you have enabled the Bluetooth function in your device.
- You should now see the Android symbol titled as “Pace Clock” in your “Downloaded” folder and this should be inserted into one of the “Screens” of your phone. Go to “Settings” and select “Display” then “Screen Timeout” and opt for the longest period from the menu that is available.
- Select the “App” by touching the icon; the application should start up and show a picture of a Pace Clock and it will proceed to connect to the unit showing the status in the lower right of the screen. There will also be a start button bottom centre and a reset button bottom right of the screen. Touch the menu function on the phone, as shown on page 5 next to the settings logo and “select a device to connect”. Select “**HC-05**” and enter PIN number “**1234**” if your device asks for it. The phone should connect after a short period; this will be confirmed by the Digital display showing the “Time-of-Day” as it is on your phone.
- The DigiPace unit will now operate as a normal Clock synchronised to your phone network for as long as you stay within the connection/control range; this may vary depending on the signal path between your phone and the unit at any time. If connection is lost, the Time-of Day function will continue automatically using the unit’s internal Quartz time base until re-connection is established.

**NB.** If your device does not automatically re-connect to the unit once in range, simply close the application and then re-open it.

## **PACE CLOCK FUNCTION**

- Touch the “**Start**” icon on your phone screen, the digital display will show “00 00” and the Sweep hand will start to rotate at one revolution per minute. The digital display will show time lapsed in minutes and seconds; touching the “**Stop**” icon will halt the sweep hand and the digital display count. The unit can be started and stopped as required until the event/activity has finished, after which the sweep hand and digital display can be reset to the start position by touching the reset icon; **do not press “Start”** again until the Sweep hand comes to rest. Please note that the digital display only shows whole seconds so you may notice after several Start/Stop operations that the sweep hand is slightly out of sync with the digital display; this can be corrected by operating the “**Reset**” function should the discrepancy of the Analogue Sweep hand and Digital display become too different.
- The “Digipace” unit while in Pace Clock mode also offers a “Practice” timer that can be used for repetitive activities such as Diving or Race start/diving practice. Select the settings option on your phone from the menu and it will display a list of “Split Times”; by selecting any time between 5 and 30 seconds the Pace Clock will provide an audible warning at these time intervals when activated. eg if 10 seconds is selected, when the count reaches 9 a short audible tone will sound and a longer one at 10. This will repeat every 10 seconds, ie 19 & 20, 29 & 30, 39 & 40 etc until the Stop button is activated. This facility can be cancelled from the “Split Time” list by selecting 0 seconds (off).
- When in Pace Clock mode the phone display Sweep hand will re-synchronise automatically to the Pace Clock on re-connection allowing you to carry on with the timing function prior to disconnection; it will also continue to run until stopped whether connected or not.

If you have trouble in loading or running the application, contact us on 01788 544839 for guidance.

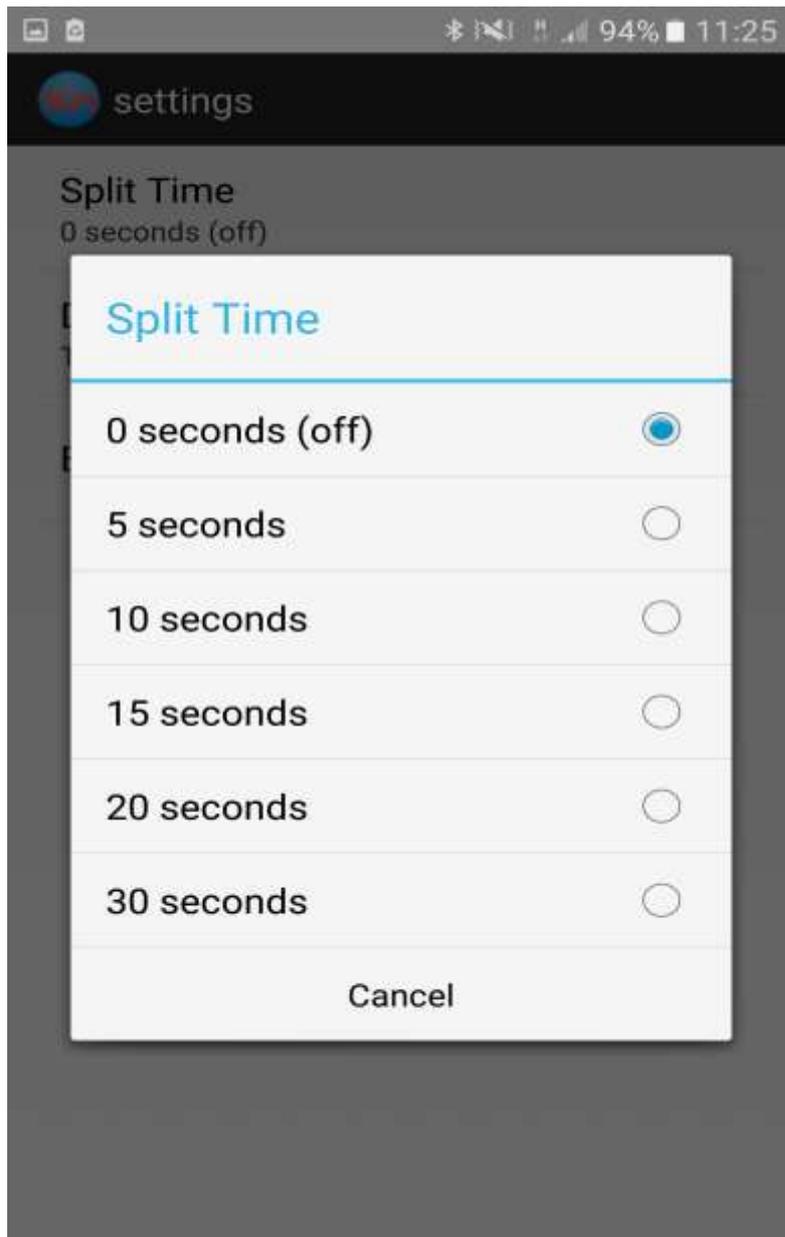
## **Guarantee**

The unit is covered for 12months from date of purchase for genuine component failure; this does not include accidental mechanical damage, water ingress to the Clock system, or mechanical damage to the Drive motor caused by physical obstruction/manual rotation of the Sweep Hand. It is advised that you **keep the original packaging** in the event you need to return the unit as repairs will be on a “Customer return to manufacturer” basis. Any damage caused during transit back to us will not be covered within the guarantee.



- This picture shows what you will see on your Smart phone/Android device once the application is loaded and selected.

Toggling the Start/Stop button will change its status from the Start symbol to the red Stop symbol. Fast Reset is used to return the Sweep hand back to the “60”/Start position after stopping the sweep hand.



- The Split Time options screen



The “Settings” screen is for selecting Split Time, Mode of Operation and Bluetooth device connection.

- **Split Time** is essentially a Practice Timer that produces “Prepare & Go” functions including an audible warning.
- **Display Type** is for setting the Mode of operation, ie Time of Day display together with controllable Pace Sweep Hand, or Pace with digital lapsed Minutes & Seconds display only.
- **Bluetooth Device** is for initial search and connection to the unit.