

# Telstar

ONLINE TIME SYNC

SELF-CALIBRATING WATCH

Your Telstar Online Time Sync watch corrects and calibrates its time through the provided Time Calibrator software.

Features include:

- Time synced to internet time servers
- 2 time zones with 12/24 hour formats & 2 separate alarms
- Automatic calendar adjustment to the year 2099
- Hourly chime option
- Stopwatch up to 24hrs
- Electro-luminescent backlight
- 3-5 year battery life (CR2032)
- Operating temperature -20°C to +60°C

## 1. BUTTON OVERVIEW

LIGHT

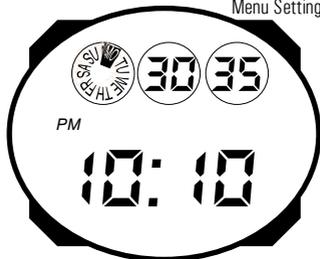
EL backlight on for 3 secs

ST/STP

Clock: Date Display

Stopwatch: Start/Pause

Menu Setting: + Value



MODE

Mode Selection  
Menu Navigation

SET/RST

Clock: Settings Menu  
Stopwatch: Reset  
Menu Setting: Go Back

## Mode Selection

Primary Timezone T1

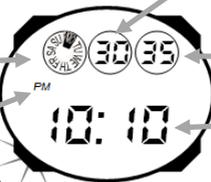
Stopwatch



## 2. PRIMARY TIMEZONE (T1)

Day

AM/PM



Date

Seconds

Time

### Setting time & date:

While in Primary Timezone mode, press **SET/RST** and the display starts to flash. Then press **MODE** to highlight the unit to adjust.

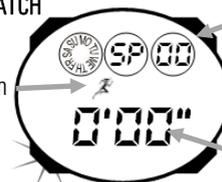
- Increase the value of the selected unit by pressing **ST/STP**. Hold to advance quickly.
- Once the watch is set to the desired time, press **SET/RST** to save settings and revert to Primary Timezone mode.

### Showing full date:

While in Primary Timezone mode, press and hold **ST/STP** to display the day and month. Note that default format is MM-DD. To switch to DD-MM, press **SET/RST** while holding **ST/STP**.

## 3. STOPWATCH

Runner Icon



1/100 Secs

Mins/Secs

In Stopwatch mode, press **ST/STP** to start or pause the stopwatch. The Runner icon will begin to flash.

- While the stopwatch is running, pressing **SET/RST** will create a split time. Press again to return to the running stopwatch.
- To switch back to Primary Timezone mode while the stopwatch is running, press **MODE** to cycle back and forth. The "Runner" icon also flashes in Primary Timezone mode to show that the stopwatch is running in the background.
- To quit Stopwatch mode, first press **SET/RST** while the stopwatch is running, then press **MODE** to advance modes.

## 4. ALARM & HOURLY CHIME

Alarm icon



Alarm Timezone

Chime icon

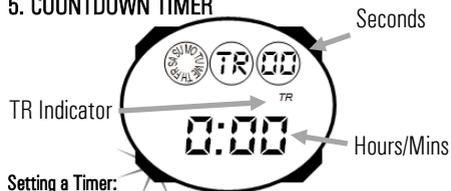
Alarm Time

### Setting alarms:

While in Alarm mode, mode, press **SET/RST** and the display starts to flash. Then press **MODE** to highlight the unit to adjust.

- Increase the value of the selected unit by pressing **ST/STP**. Hold to advance quickly. Note that there are two alarms—one for each time zone. To switch between alarms, press **MODE** to cycle to the time zone indicator, then press **ST/STP** to adjust between T1 and T2.
- Once the alarm is set to the desired time, press **SET/RST** to save settings and revert to Alarm mode.
- When an alarm is set, the Alarm icon appears on the display in all modes. In Alarm mode, press **ST/STP** to cycle between ALARM ON, HOURLY CHIME ON, BOTH ON, and BOTH OFF.
- When an alarm sounds, it will ring for 20 sec or until any button is pressed.

## 5. COUNTDOWN TIMER



### Setting a Timer:

While in Countdown Timer mode, press **SET/RST** and the display starts to flash. Then press **MODE** to highlight the unit to adjust.

- Increase the value of the selected unit by pressing **ST/STP**. Hold to advance quickly.
- Once the timer is set to the desired period of time, press **SET/RST** to save settings and revert to Timer mode.
- Press **ST/STP** to start the timer. Once the countdown runs lower than 10 seconds, a beep will sound every second.
- To switch out of Countdown Timer mode, press **MODE**. The "Runner" icon also flashes in Primary Timezone mode to show that the stopwatch is running in the background.
- At the culmination of the countdown, the alarm will sound for 20 seconds (even in Primary Timezone model, and the watch will return to Countdown Timer mode.

## 6. SECOND TIMEZONE



### Setting an Alternate Timezone:

Time for the 2nd Timezone is set as per the procedure for the Primary Timezone.

Note that the 2nd Timezone only allows for variations in units of 30 minutes difference from the Primary Timezone. After Calibration is performed, the minute indicator of the 2nd Timezone will be equal to the Primary Timezone.

## 7. CALIBRATING AND CORRECTING TIME

Your Telstar Online Time Sync watch offers synchronisation to internet time servers, with the added ability to improve its accuracy over time through self-calibration.

Online Time Sync is achieved using a photovoltaic cell embedded in the face of the watch, which communicates with a PC or Smartphone app (free download).

In order to sync the time, the user holds the watch up to his PC or smartphone screen, and initiates calibration mode on both the watch and the PC app. The photovoltaic cell "reads" a signal which is sent by the PC via a series of flashing lights, and sets the time and date to be in sync with that of the PC (which is in turn synchronised over the internet to the atomic clock).

Each time the watch is synchronized, a microchip measures the degree to which the watch has deviated from atomic time during the period since the last sync. It then calibrates the watch timekeeping module to allow for environmental factors such as temperature which impact the normal timekeeping accuracy of any quartz watch. This self-calibration literally slows down or speeds up the watch as needed to adjust for the temperatures experienced during normal wear – with the result that the watch becomes more and more accurate each time it is synchronised.



Time Calibrator PC App (Windows XP/Vista/7/8)

### Setting up the Time Calibrator App

Please visit [www.telstarwatches.ie/timecalibrator](http://www.telstarwatches.ie/timecalibrator) for details on how to download the Time Calibrator PC or Smartphone App.

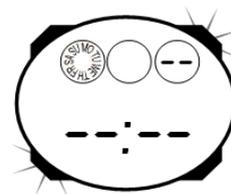
Once the app is installed on your PC or Smartphone, there is a simple process to synchronise the watch to the internet time server. Note that internet access is required on your PC or Smartphone to complete this process—if the App cannot connect to the internet, it will instead prompt you to sync your watch with your PC or Smartphone's onboard clock.

### Calibrating the Watch

Open the Time Calibrator app on your PC or Smartphone. The App will automatically update itself to an internet time server if a network connection is available.

Once this is complete, and the current time is displayed on the App screen, prepare the watch for calibration by entering Calibration Mode.

Press and hold **ST/STP** and **MODE** together for 2 seconds to enter Calibration mode. The watch screen will revert to zero as below, and the display will flash to indicate it is ready for calibration:



Immediately hold the watch up to your PC or Smartphone screen, positioning the watch face directly in front of the "Calibration Zone" on the App. Press the **CALIBRATE** button on the App.

The Calibration Zone area of the app will flash a number of times, signalling the current time and date to the watch via the photovoltaic cell. After about 3 seconds, the watch will beep to indicate a successful calibration.

For optimal precision, calibrate your watch 3-4 times a year.

For troubleshooting, see [www.telstarwatches.ie/timecalibrator](http://www.telstarwatches.ie/timecalibrator)