

# ULTRAK 490L

## DIGITAL QUARTZ STOPWATCH WITH SPLIT AND LAP TIME MEASUREMENT AND STROKE/FREQUENCY MEASURING FUNCTIONS

### FEATURES

The Quartz Stopwatch is a digital stopwatch featuring memory and stroke/frequency measuring functions. In addition, the stopwatch is water resistant. Therefore, it is suitable for aquatic sports or use in rainy weather.

### STOPWATCH

The stopwatch can measure up to 10 hours in 1/100 seconds..

### SPLIT TIME/LAP TIME MEASUREMENT

Up to 100 split times and lap times can be measured.

### LARGE-SIZED THREE-ROW DISPLAY PANEL

Accumulated elapsed time / Lap time in progress, split time and lap time are displayed at the same time in separate rows, and they can be measured successively without releasing split or lap time measurement.

### MEMORY FUNCTION

Up to 100 measurements can be stored in memory, and they can be recalled after measurement in over.

## LED BACKLIGHT

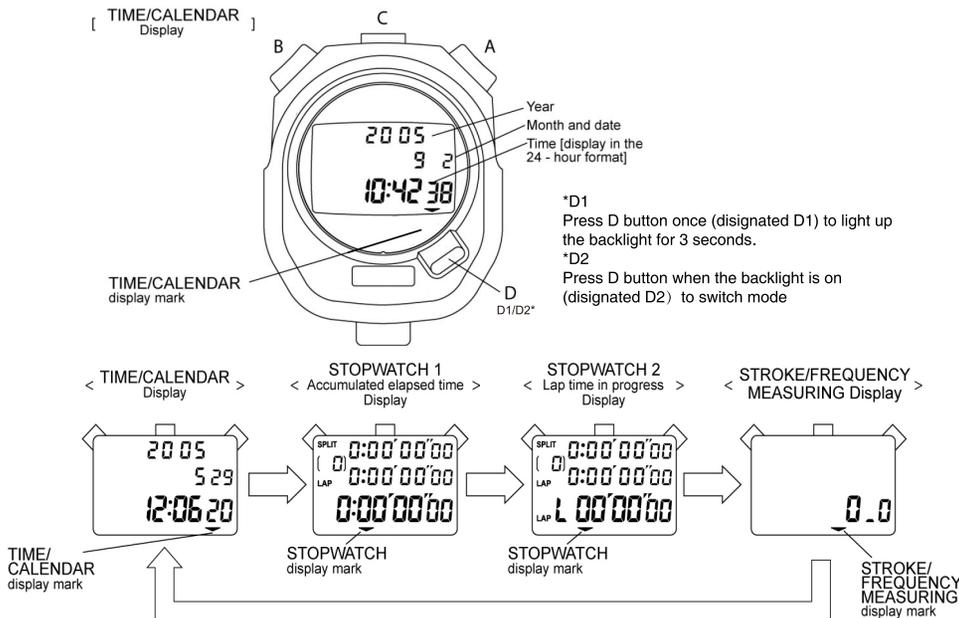
### TIME/CALENDAR DISPLAY

Year, month, date, hour, minutes and seconds.

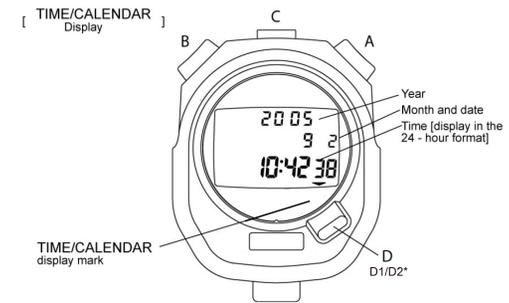
### BATTERY

Lithium battery CR2032 or equivalent is used.

There are four buttons as indicated in the illustration below



## TIME/CALENDAR SETTING



1. Press "D2" to show the TIME/CALENDAR display. The TIME/CALENDAR display mark will appear.
2. Press "B" repeatedly to select the digits (flashing) to be adjusted. With each press of "B", the digits to be adjusted change over in the following order.



- Press "A" to set the flashing digits or reset the seconds to "00"
  - \* The digits move quickly if "A" is kept pressed.
  - \* When the seconds digits count any number from "30" to "59" and "A" is pressed, one minute is added and the second digits are reset to "00"
- After all the adjustments are completed, press "B" to return to the TIME/CALENDAR display.

**Notes:**

- Hour digits are displayed in the 24-hour format.
- Year digits can be set from 2000 to 2099. The calendar adjusts automatically for odd and even months including February of leap years.

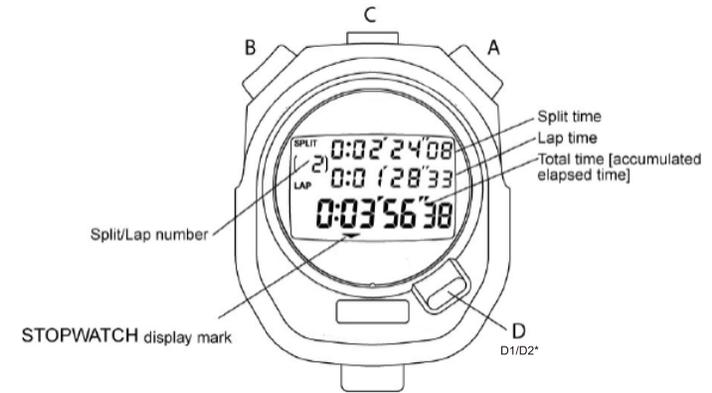
**LED BACKLIGHT**

Press D button once, the LED backlight will light up for 3 seconds, if any button is pressed with the backlight on, apart from the normal button function, the backlight will automatically extend for another 3 seconds.

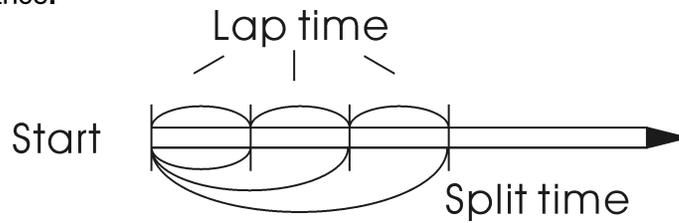
**STOPWATCH**

Press "D2" in the TIME/CALENDAR display to show the STOPWATCH display. The STOPWATCH display mark will appear. The stopwatch can be measure up to 10 hours in hours, minutes, seconds and 1/100 seconds.

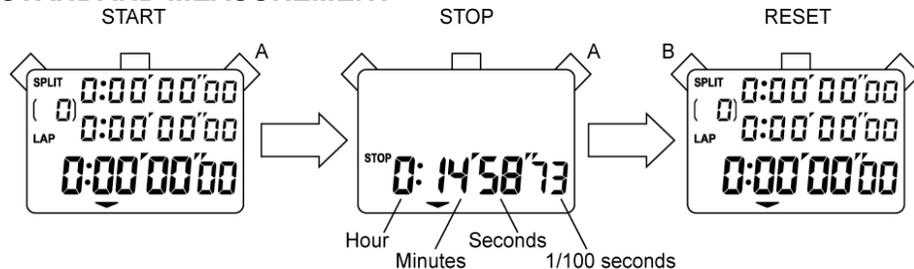
- \* Before using the stopwatch, be sure to reset the digits to "0:00'00"00".
- When the stopwatch is stopped, press "B".
- When the stopwatch is counting, press "A" to stop the measurement and then press "B"



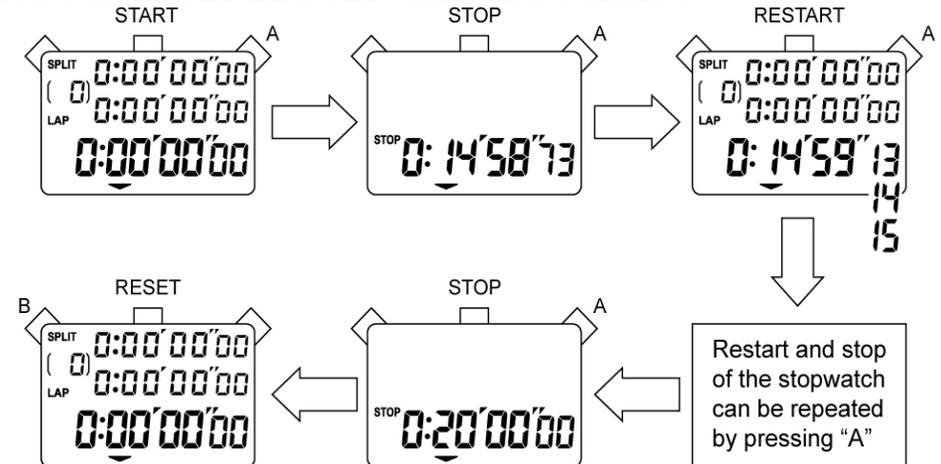
- \* "Split time" refer to an elapsed time required to cover a distance from the start to a given point.
- "Lap time" refers to an elapsed time required to cover a given section of the whole distance.



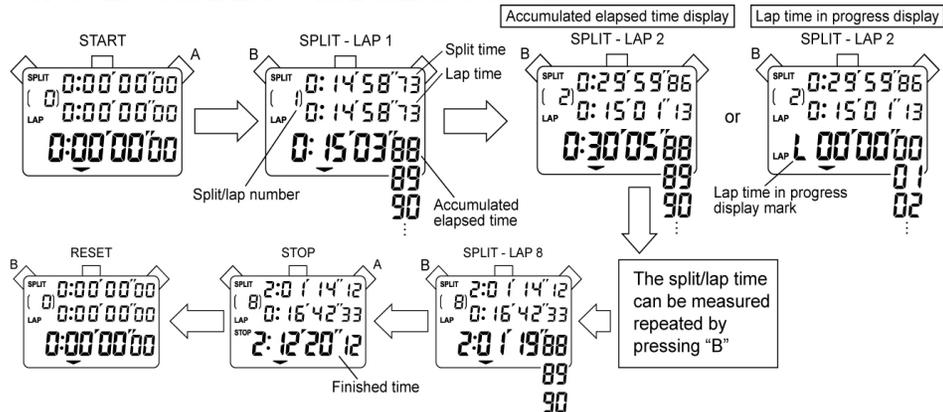
**1. STANDARD MEASUREMENT**



**2. ACCUMULATED ELAPSED TIME MEASUREMENT**



### 3. SPLIT TIME/LAP TIME MEASUREMENT

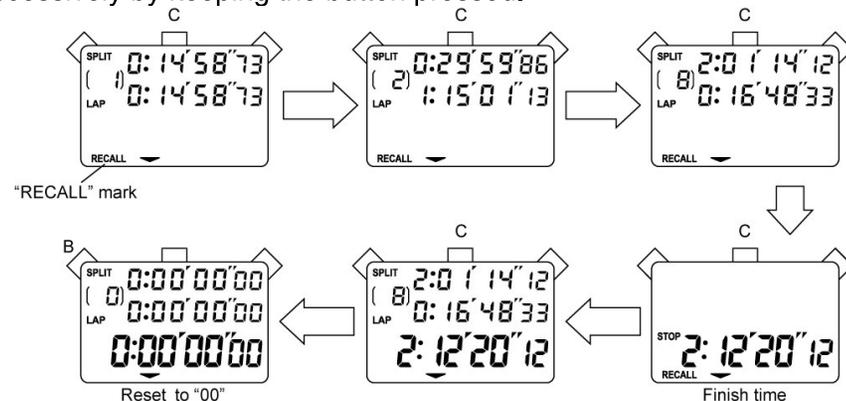


- Note:**
1. When the number of stored measurements exceeds 90, flashing "FULL" appears, and when it exceeds 100, a warning sound start beeping.
  2. In the lap time in progress display, when the lap time measurement in progress exceeds 1 hour, the hour digit appears in place of the mark for lap time in progress display.

### 4. HOW TO USE THE MEMORY FUNCTION

The stopwatch can store up to 100 split times, 100 lap times and total elapsed time. They are automatically entered into the memory.

- \* With each press of "C", the time stored is recalled. The time can be recalled successively by keeping the button pressed.



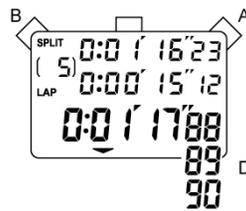
- \* To stop the recall of the stored data, press "B" or "D2". The measurements when the stopwatch was stopped will be shown. Then press "B" to reset the digits to "00".

- \* The time stored in the memory can be recalled even while the stopwatch is measuring.

	With each press of "C"
When the stopwatch is stopped	Split time and lap are recalled starting with the first ones.
When the stopwatch is measuring	The times are recalled starting with the last ones.

- \* To measure the lap time and split time while the stored data are recalled operate the buttons as follows.

Press "B" to measure new lap time and split time.  
 Press "A" to stop the measurement.  
 Press "D2" to return to the measurement mode.

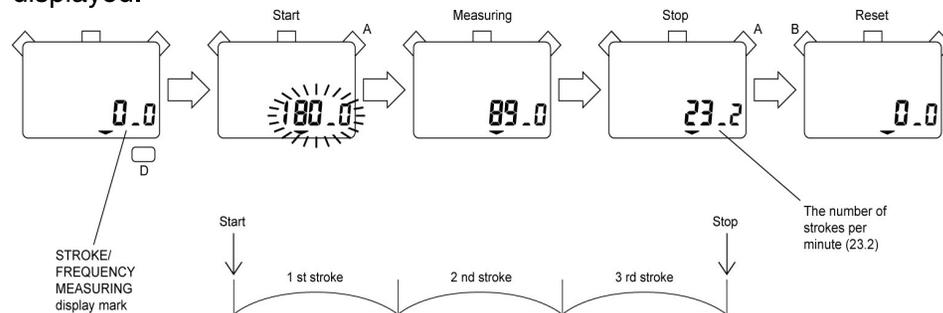


Notes:

1. Even if the digits are reset to "00", stored times are not erased and can be recalled by pressing "C" unless new measurement is started.

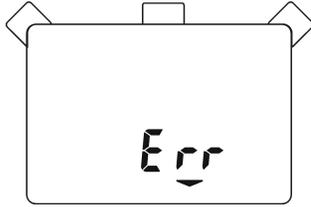
### STROKE/FREQUENCY MEASURING

Press "D2" to show the STROKE/FREQUENCY MEASURING display. Start the measurement by pressing "A" and stop the measurement by pressing "A" after the third stroke was made. The number of strokes per minute will be displayed.



**Notes:**

1. During 1 second after the measurement has been started by pressing “A”, flashing “180-0” is displayed. If the measurement is stopped by pressing during this period, “Err” will appear. If the measurement is not stopped by pressing “A” after more than 18 seconds have elapsed, “Err” will automatically appear. Therefore, note that measurable number of strokes per minute is between 10 and 180.



2. If “B” is pressed while the measurement is stopped of “Err” is shown, the digits will be reset to “0-0”. Even if the digits are not reset to “0-0” with the measurement stopped or “Err” shown of the display, the measurement can be started by pressing “A”.

**BATTERY CHANGING INSTRUCTIONS**

**Power and Reset**

Battery life: 2 years

Battery type: CR2032 Lithium or Equivalent

Avoid touching any electrical components on the PCB when the back cover is removed.

When the display becomes dim or turned off, battery replacement is necessary. Unscrew and remove the back cover. Push the left hand side of the battery holder. Battery will slide out. Replace a new Lithium battery CR2032 or equivalent with positive side facing up. Connect the two C10 pads one second using a metal tool such as paperclip or screwdriver. Re-screw the back cover

**IMPORTANT: Power up and Reset**

If you have a problem with the stopwatch when you replace new battery, you can try to reset the electronic circuit by using a metal paperclip or screwdriver to connect the 2 metal pads in the “C10” pad near the battery.



**WARNING**

- **INGESTION HAZARD:** This product contains a button cell or coin battery.
- **DEATH** or serious injury can occur if ingested.
- A swallowed button cell or coin battery can cause **Internal Chemical Burns** in as little as **2 hours**.
- **KEEP** new and used batteries **OUT OF REACH OF CHILDREN**.
- **Seek immediate medical attention** if a battery is suspected to be swallowed or inserted inside any part of the body.



## STATEMENT

Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate.

Even used batteries may cause severe injury or death.

Call a local poison control center for treatment information.

This product use battery type CR2032.

This product nominal battery voltage is 3V.

Non rechargeable batteries are not to be recharged.

Do not force discharge, recharge, disassemble, heat above 60°C or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.



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## STATEMENT

Ensure the batteries are installed correctly according to polarity (+and -).

Do not mix old and new batteries, different brands or types of batteries, such as alkaline, carbon-zinc, or rechargeable batteries.

Remove and immediately recycle or dispose of batteries from equipment not used for an extended period of time according to local regulations.

Always completely secure the battery compartment. If the battery compartment does not close securely, stop using the product, remove the batteries, and keep them away from children.



### CEI FIVE YEAR LIMITED WARRANTY

CEI warrants this product (except for batteries) to be free from defects in materials and workmanship under normal use for five years from the date of purchase. CEI will, at its option, repair or replace the product free of charge. The warranty does not apply to damage caused by negligence, accident, misuse or repair. No responsibility is assumed for any incidental or consequential damages. Some states do not allow limitations on how long an implied warranty lasts and some states do not allow the exclusion or limitation of incidental or consequential damages, so that the above limitations may not apply. This warranty gives specific legal rights, and other rights may exist which vary from state to state. To obtain warranty service send the unit prepaid and insured, with dated proof of purchase, to: CEI, 550 Patrice Place, Unit C, Gardena, CA 90248.

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