

ULTRAK 496

Instruction Manual



FEATURES

- 1/100 SEC STOPWATCH, range 10 hours
- SPLIT TIME/LAP TIME/ LAP TIME IN PROGRESS MEASUREMENT
- STROKE/FREQUENCY MEASUREMENT in STOPWATCH RUNNING MODE
- RACE CONTROL FUNCTION
- 500 SEGREGATED MEMORIES
- TIME/CALENDAR DISPLAY

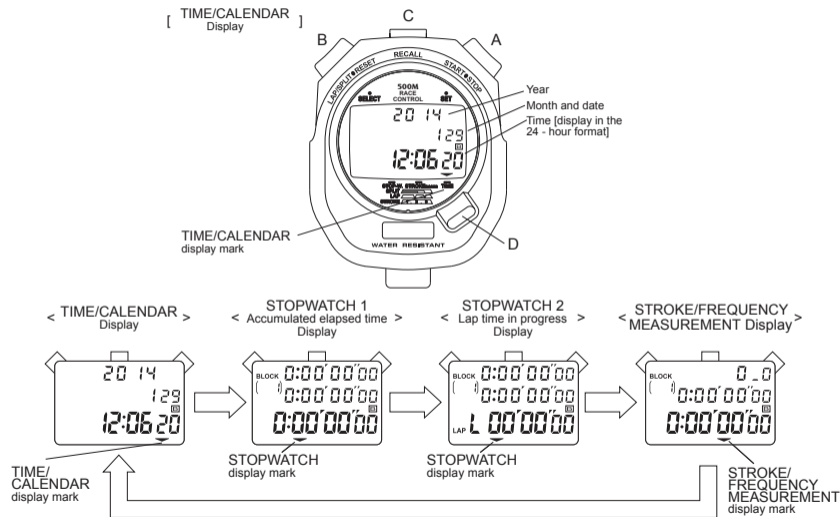
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See www.dtsc.ca.gov/hazardouswaste/perchlorate."

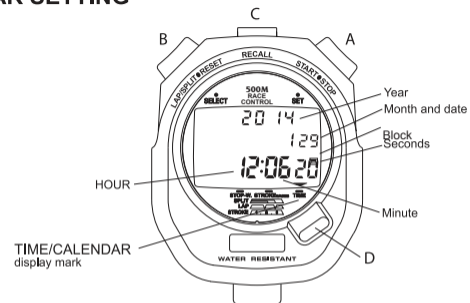
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There are four buttons as indicated in the illustration below



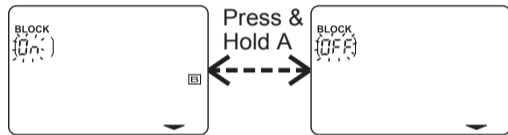
TIME/CALENDAR SETTING



1. Press "D" 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.



3. 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 is counting in the range between “30” and “59” and “A” is pressed, one minute is added and the second digits are reset to “00”.
4. When BLOCK is displayed, press and hold A to turn BLOCK ON and OFF, all stored memories will be cleared. With BLOCK ON, memories can be used for separate races.



5. After all the adjustments are completed, press “B” to return to the TIME/ CALENDAR display.

Notes:

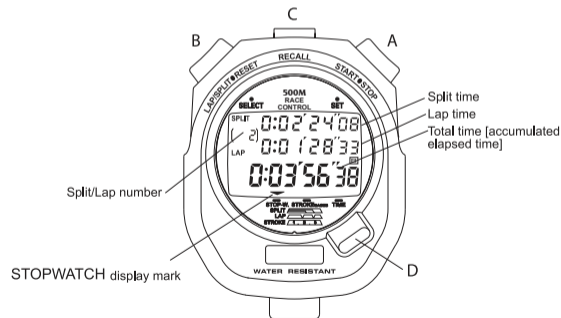
1. Hour digits are displayed in the 24-hour format.
2. Year digits can be set from 2000 to 2099. The calendar adjusts automatically for odd and even months and leap years.
3. a “B” indicator is shown when BLOCK is turned ON. When BLOCK is ON the stopwatch can be used to record lap times for multiple races.

STOPWATCH

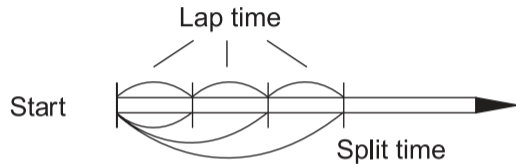
Press “D” in the TIME/CALENDAR display to show the STOPWATCH display. The STOPWATCH display mark will appear.

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

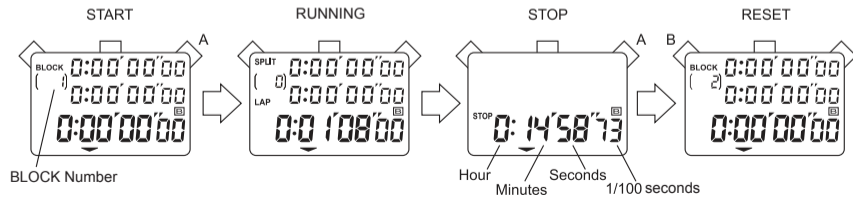
- * Press A to START/STOP, B to LAP/RESET, C to RECALL memories, and D to switch between modes.



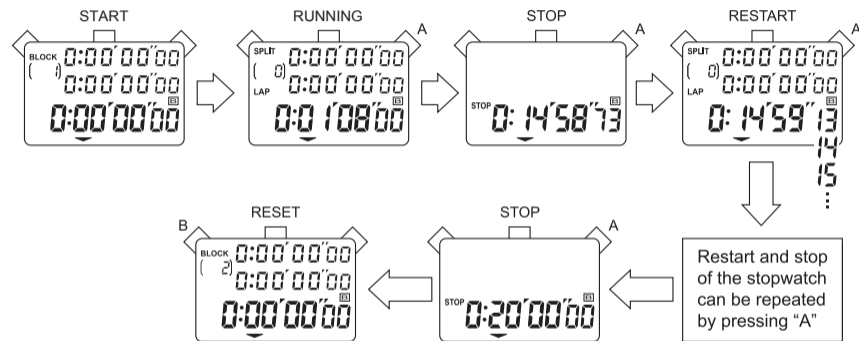
- * “Split time” refer to an elapsed time required to cover a distance from the start to a given point.
 “Lap time” refers to an elapsed time required to cover a given section of the whole distance.



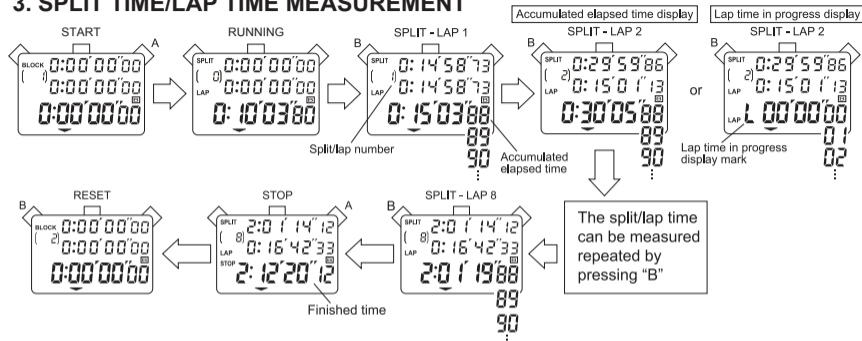
1. STANDARD MEASUREMENT



2. ACCUMULATED ELAPSED TIME MEASUREMENT



3. SPLIT TIME/LAP TIME MEASUREMENT

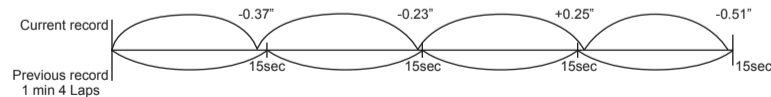
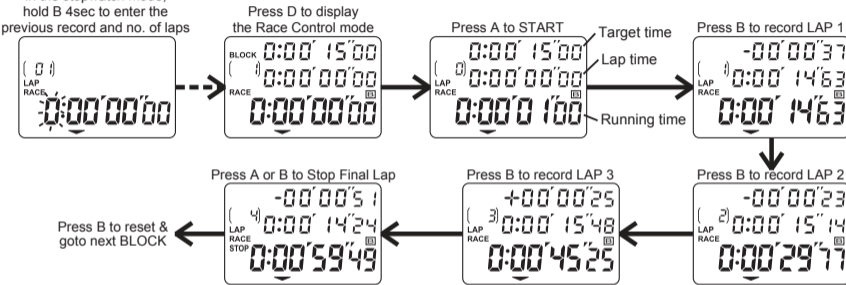


- Notes:**
1. When the number of stored measurements exceeds 490, a flashing "FULL" appears, and when it exceeds 500, a warning beep starts for a few seconds. When memories are used up, no more races can be recorded in memory.
 2. Each race consumes some memories for start date and race information, taking more races will reduce the total number of lap/ split that can be recorded.
 3. In the lap time in progress display, when the lap time measurement in progress exceeds 1 hour, the hour digit replaces the "L" in the first digit.

4. RACE CONTROL

Race Control is a function to compare the current split times with a previous record.

In the stopwatch mode, hold B 4sec to enter the previous record and no. of laps



At the stopwatch display press and hold B for 4 seconds to set the previous record which you want to compare the current record with. Press B to go to the hour, minute or seconds digits and A to set the digits. Enter the total elapsed time for the record and the no. of laps taken.

(e.g. 1 minute total elapsed time and taken 4 laps), Press D to display the race control mode with the average lap time (1 minute /4= 15seconds) shown on the top row.

Press A to start and B for each lap. The lap time is shown in the middle row and difference (always from start) is shown in the top row.

This shows how an athlete performs at each lap, when compared with a previous record.

The race control automatically stops when A or B for the last set lap is pressed. Another press of B returns the display to the previously set record.

Press and hold B to change the record or disable Race Control (press and hold B when time is all zero).

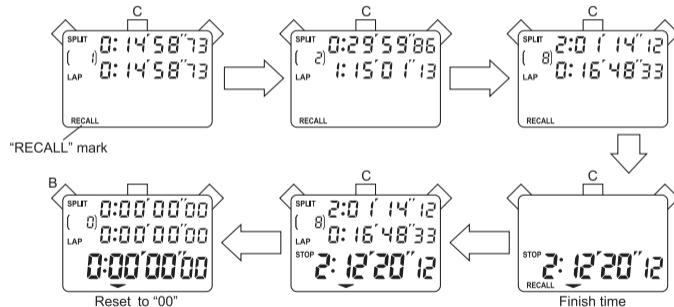
Note: Setting and calculation is the same for the LAP TIME IN PROGRESS display mode.

5. HOW TO USE THE MEMORY FUNCTION

The stopwatch can store up to 500 split, lap and total elapsed times. They are automatically entered into the memory.

BLOCK "OFF"(to record lap times for a single race)

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



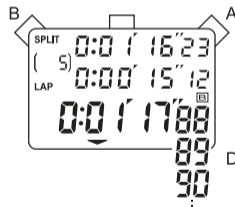
* To stop the recall of the stored data, press "B" or "D". The measurements when the stopwatch was stopped will be shown. Then press "B" to reset the digits to "00".

- * The time stored in the memory can be recalled even while the stopwatch is running

	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 "D" to return to the measurement mode.

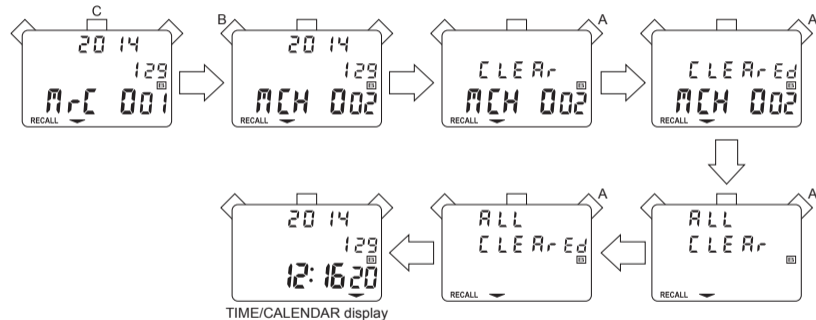


Notes:

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.

BLOCK "ON" (to record lap times for multiple races)

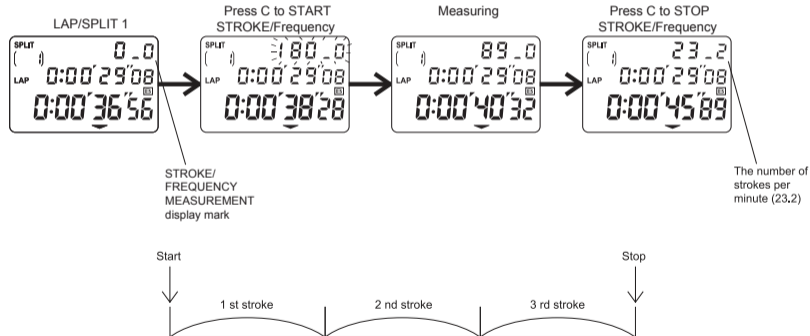
Press C to recall and B to switch to the next race records. Press and hold A to clear records in that race, holding A further will clear all records. Display will return to the TIME/CALENDAR display.



Notes: a "⏏" indicator is shown when BLOCK is turned ON.

STROKE/FREQUENCY MEASUREMENT

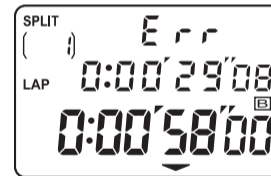
Press “D” to show the STROKE/FREQUENCY MEASUREMENT display.
Press “C” at start of stroke 1 and “C” again at the end of stroke 3, the stroke frequency (number of strokes/minute) will be displayed at the top row.
The stopwatch is independent, it can be running, stopped, or at lap time when stroke is measured.



Notes:

1. Within 1 second after pressing “C” to start stroke measurement, flashing “180-0” is displayed. If the measurement is stopped by pressing “C” during this period, “Err” will be displayed. If the measurement is not stopped by pressing “C” after more than 18 seconds, “Err” will also be displayed. Measurable number of strokes per minute is between 10 and 180.

Show “Err” during
faster than 1 sec or slower than 18 sec



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 AC 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 “AC” pad near the battery.

