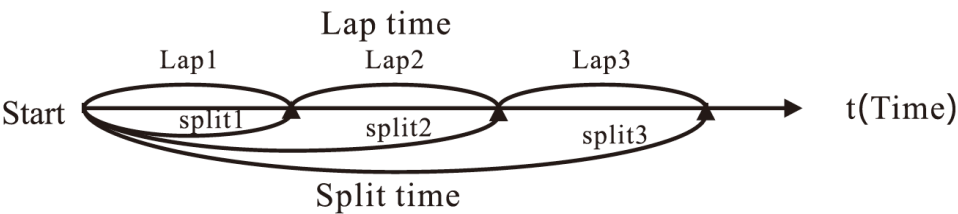# HART

SPORT

Thanks for your purchasing of this professional stopwatch. Its advanced Japanese CMOS, combined scientific mechanical theory makes sure your valuable purchasing of a professional stopwatch. Besides normal functions of stopwatches, it has distinct advantage: rowing frequency, temperature and decimal stopwatch.

Summary

1. LAP & SPLIT

2. BUTTONS & FUNCTIONS
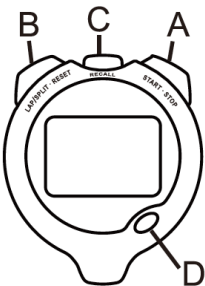
Button A	Start/Stop/Set	Button B	Reset/Lap/ Split/Select
Button C	Recall	Button C	Modeilight (Light Option)
Button E	Backlight		

Product Main Features

1. CHRONOGRAPH

- Display of lap, split, and running chronograph time.
- Measure up to 9 hours 59 minutes and 59.99 seconds (conventional stopwach) or 999.999 minute(decimal stopwatch).
- 100 recallable lap and split memories.
- The memory can be recalled during operation and after reset.
- Display of best (BES), slowest (SLO), and average (AVE) lap time for the laps traversed.
- Lap counter (000-999).
- Convertible to decimal stopwatch.

2. ROWING FREQUENCY

- Display the rowing frequency: stroke/minute.
- Measure range: 10-180 strokes/minute.
- 100 scores can be read from the memory.
- The memory can be recalled during operation and after reset.
- Display of best (BES), slowest (SLO), and average (AVE) rowing frequency.

3. ENVIRONMENT TEMPERATURE AND COUNTER

- Display the current environment temperature.
- Temperature measure range: -40-C - +60-C (-40"F -140"F).
- Simultaneous counting and timing.
- Counting range:0~99999.
- Timing range:9H59M59.99S

4. COUNTDOWN TIMER

- Two countdown timers are pre-settable and 9 hours 59 minutes 59 seconds for each.
- If not set one countdown timer, the other one is workable.

5. PACER

- Pre-settable from 5 beeps/minute to 320 beeps/minute.
- Display of pacer frequency, beeps and time.

6. CLOCK

- Display hour, minute, second, year, month, date, week, and alarm, auto calendar.
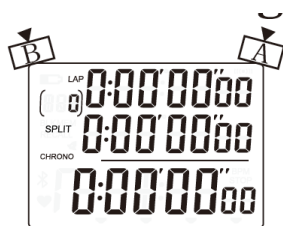- 12/24 hours format option.

7. OTHER FEATURES

- ON/OFF display
- Button mute
- Low battery display
- Display contrast adjustment
- LED backlight (optional)
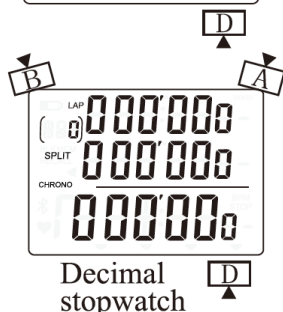- Restore factory settings

HART

SPORT

Chronograph Operation

Depress D button to select the operating mode. The chronograph indicator "CHRONO" is shown.

Decimal stopwatch

After the stopwatch is reset, long Press B button for 3 seconds to switch between conventional stopwatch and decimal stopwatch timing.
Note: After the stopwatch switches the timing unit, all memories are automatically cleared. Depress A to start timing.
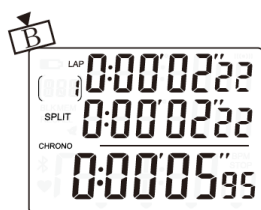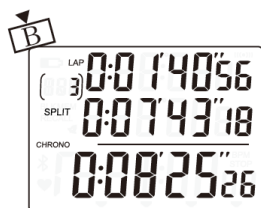
Conventional stopwatch

Depress B to read the 1st lap time. Lap is shown at the upper row. SPLIT is shown at the middle row; RUNNING CHRONO is shown at the bottom row.
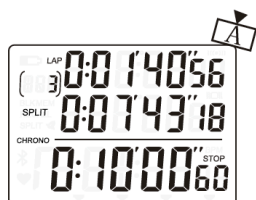
Depress B to display second lap time, and the lap counter is shown in the upper left corner.

Depress B to display third lap time, and depress B again to display the fourth lap time. Operate as above procedure, the lap counters within 100 will be shown.
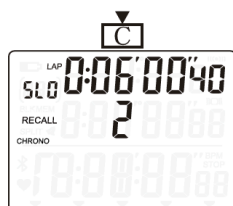
**46-120**

Depress A to stop counting.

Depress C to display RECALL, the AVE lap time is shown at the upper row. Memory number is shown at the middle row.

Depress C again to display the BES LAP time.The fastest LAP number is shown at the middle row.
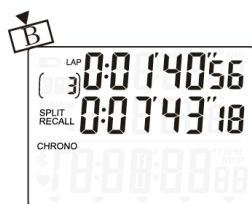
Depress C again to display the SLO LAP time the slowest LAP number is shown at the middle row. And depress C continuously. to circle display the AVE, BES and SLO LAP time.
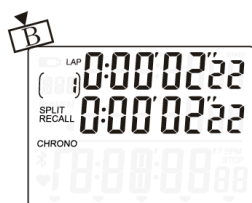
Depress B to recall the 1st LAP data during the RECALL mode.
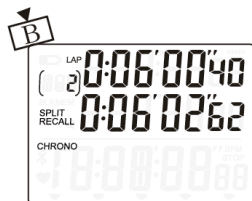
Depress B again to recall the 2nd LAP data.

Depress B again to recall the 3rd LAP data.

REMARK

1. When RECALL appears, with each press of B, the stored data are recalled successively in the following order:
   1 → 2 → 3 → ••• → 10/20/30/50/60/80/100/200 → STOP
   stop time, Press A is on the contrary.

2. If either the LAP or SPLIT time is more than 10 hours, the AVE, BES and SLO display function will be disabled.

3. If the lap counter is greater than the memory, the stored data more than the memory should be deleted when calculate the AVE, BES and SLO.

4. The stored memory can be recalled during the STOP or RUNNING status.

5. If the middle line"————"flash during lap counting, it means that the memory is already full. Then the following lap counting cannot be stored.
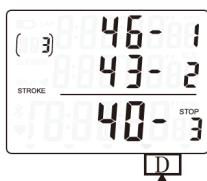
Depress D to return the rowing frequency to the stopped status.

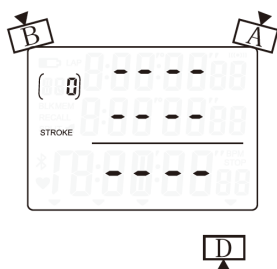Depress A to restart or B to reset to "0"

Note

1. *After pressing B to reset to "0" if there is memory before reset, press C will enter into*

2. *If there is no memory during the rowing frequency measuring, it cannot go into the RECALL mode when press C.*
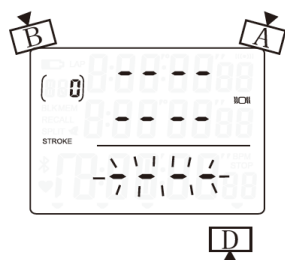
Rowing Frequency Operation

It will measure once every 3 times rowing to calculate the current rowing times per minute.

Depress D to select the rowing frequency mode, and the rowing indicator.STROKE" is shown. The recorder of lap counter in the left up corner will display the current memory.

Depress A to start measuring the rowing frequency, the bottom row will flash.
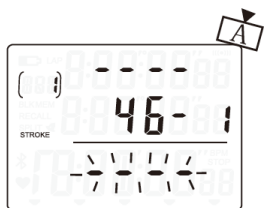
Depress A after rowing 3 times to read the rowing frequency at the bottom row, it will automatically changes to display at the middle row and flash at the bottom row after 1 second.
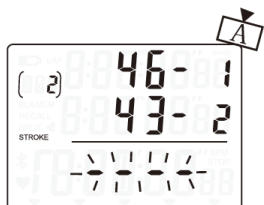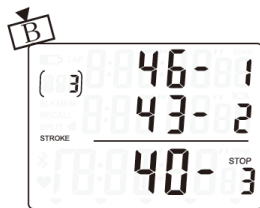
Depress A again after rowing 3 times to get the 2nd rowing frequency. The former data displayed at the middle row will change to the upper row, the current data will display at the middle row after display shortly at the bottom row. The bottom row will flash.
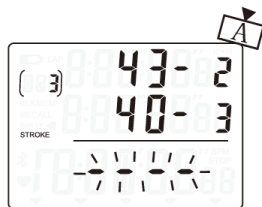
Depress A again as above operation to get the 3rd rowing frequency.

Depress B to stop the rowing frequency, and it will display "STOP".
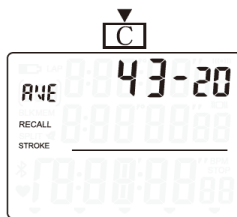
Depress C to enter into RECALL and display "RECALL", the AVE rowing frequency and memory number will display at the upper row.
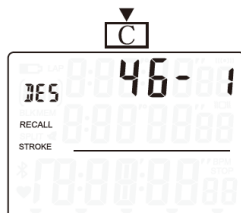
Depress C again to display the BES rowing frequency and the serial number.
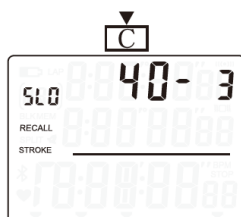
Depress C again to display the SLO rowing frequency and the serial number. Depress C continuously to circle display the AVE, BES and SLO rowing frequency.
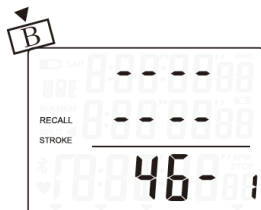
Depress B to display the 1st rowing frequency at the bottom row during RECALL.

Depress B again to display the 2nd rowing frequency at the bottom row, and the 1st rowing frequency will change to display at the middle row.
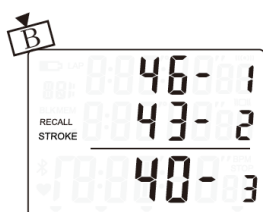
Depress B again to display the 3rd rowing frequency at the bottom row, and the 1st rowing frequency will change to display at the upper row and the 2nd rowing frequency will change to display at the middle row.
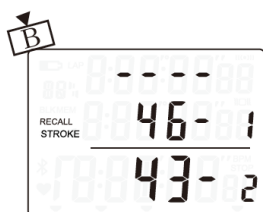
REMARK

1. Depress C to enter into recall and display "RECALL" when the rowing frequency display "STDP" or measuring.

2. When RECALL display, with each press of B, the stored data is recalled successively in the following order:
   1 → 2 → 3 → ••• → 100 → **STOP** Press A is on the contrary.

3. If the rowing frequency is over 180 or under 10, the test result will display Err, and it won't be stored and counted into the data of AVE, BES and SLO.

4. If the rowing frequency is greater than the memory, the stored data more than the memory should be deleted when calculate the AVE, BES and SLO.

5. If the middle line"————"is flashing during the rowing frequency measurement, it means that the memory is already full. Then the following data cannot be stored.
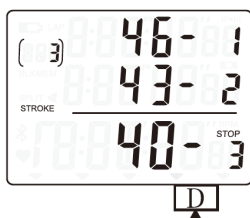
Depress D to return the rowing frequency to the stopped status.

Depress A to restart or B to reset to "0"

Note

1. *After pressing B to reset to "0" if there is memory before reset, press C will enter into*

2. *If there is no memory during the rowing frequency measuring, it cannot go into the RECALL mode when press C.*

Environment Temperature and Counter Operation
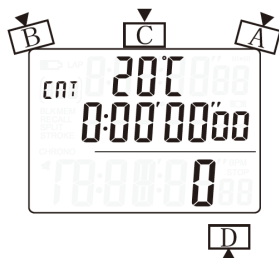
Depress D to select the environment temperature/ counter mode

and the counter indicator " 𝖢𝖭𝖳 " is shown.

The Upper row shows the measured temperature

The middle row shows the time of counting operation

The bottom row shows the counter

Press button C to Switch celsius·c or Fahrenheit ˚F

Press button A once, the bottom row is increased by 1, and the middle row starts timing at the same time

Press button A continuously, and continue to add the bottom row

Press button B to stop the timing, and then press button B to clear the counting and timing.

Countdown Operation

Press button D to select the countdown mode, and the countdown indicator " TR "is shown, the upper row is displaying the 1st countdown timer, the middle row is for the 2nd countdown timer. The bottom row is for four digit counter.
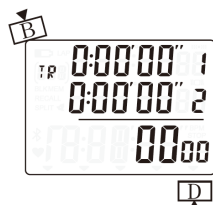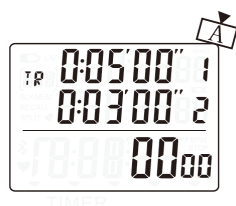
Hold button B for 2 seconds to enter the countdown timer and round setting: the 1st countdown digit for hour will blink, press button A to set the number, press button B to select the digit adjusted, in turn: hour, minute, second for the 1st countdown; hour, minute, second for the 2nd countdown timer and number of rounds in the bottom row.

Press A to start the 1st countdown timer with "1 "at the top right comer blinking and the timer into counting down. When the 1st group countdown timer approaches "0", it will return to its original set value and start the 2nd group countdown timer with 4 BiBi sounds indication.

When the 2nd countdown timer approaches "0", the 2nd group timer will return to its original set value and return to the 1st group countdown timer with 2 BiBi sounds indication, when the number of rounds in the bottom row is not set, the counter in the bottom row will automatically increase by 1, when the number of round in the bottom row is set to a value, the counter in the bottom row will be automatically reduced by 1. At any time during countdown, pressing A will stop counting.

NOTE:

1. Setting only the 1st group countdown timer, no setting the 2nd countdown timer, then the 1st group countdown timer will count circulatory.

2. Setting only the 2nd group countdown timer, no setting the 1st countdown timer, the 2nd group countdown timer will count down once, without circulation. When the 2nd countdown timer counts to 0, the bottom 4 digits will be advancd or reduced by 1 automatically. Press A again to restart the 2nd countdown timer.

3. When both countdown timers are not set, it will default the 1st group countdown timer as 10 hours, then the 2nd group timer keeps 0, and count circulatory in every 10 hours.

4. When the number of rounds in the bottom row is not set, the counter in the bottom row will automatically count in sequence. when the number of bottom rows is set to a value, the number of rounds will be automatically reduced by 1, when the time of each round reaches zero. the time will be automatically stopped and the number of rounds will return to its original set value.

Pacer Operation
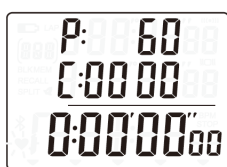
Press button D to select the PACER mode, and the pacer indicator " P " " C " is shown, the upper row is displaying the FREQUENCY, the middle row is for numbers of beats. The bottom row is for timing.
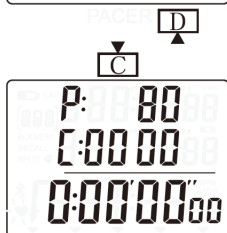
Press button C to select the frequency. e.g: 5,10,15 ,20,25,30,35,40,45,50,55,60,65, 70, 75,80,85,90,95, 100,105,110,115,120,150, 180,240,320.
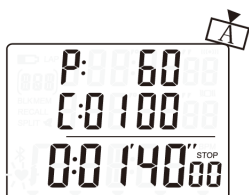
Press A to start the Pacer. When the frequency 60 is selected, there will be a Beep sound of 60 times/ minute, the middle row displays the numbers of beats, the bottom row displays the time duration. Press A again to stop the pacer with "STOP" showing, then press B to reset the pacer beats and time counting.

Clock & Alarm Operation
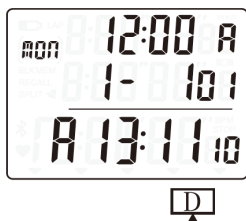
Press the button D to select CLOCK mode: The alarm hour, minute, year, month, date, week, hour, minute, second are displayed as left graph showing. Hold button B for 2 seconds into Clock setting mode, Press B to select the digit, and press A to adjust, press D to return clock mode.
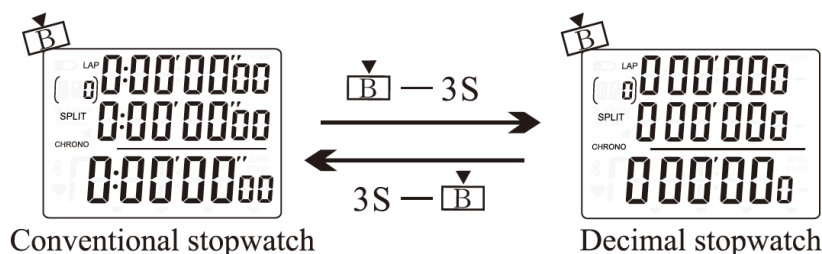
Note

Alarm will start ringtone automatically for 60 seconds after the alarm time is set and turned on. in CLOCK mode, press button C to turn on or turn off the alarm ringtone, When alann is on, the symbolr1m.m "will display; when alarm is off, no " ⑴(•)⑴ " symbol

Decimal Stopwatch Operation

The difference between a decimal stopwatch and a conventional stopwatch is that it uses a different minimum timing unit. the minimum timing unit of the conventional stopwatch is 0.01 seconds, and the maximum timing is 10 hours. the minimum timing unit of the decimal stopwatch is 0.001 minutes, and the maximum timing is 1000 minutes.

Depress D button to select the operating mode, The chronograph indicator "CHRONO " is shown. After the stopwatch is reset, long press button B for 3 seconds to switch to the decimal stopwatch display. All timing operations of the decimal stopwatch are the same as those of the conventional stopwatch. After the decimal stopwatch is reset, long press button B for 3seconds to return to the conventional stopwatch display.

Conventional stopwatch   Decimal stopwatch

*Note: After the stopwatch switches the timing unit, all memories are automatically cleared.*

Backlight Operation

Press button E or long press button D for 1 second to open the backlight for 5s.(It is optional to longpress button D for 1 second to tum on the backlight)

NOTE: *for backlighl function consume a lot of battery power, please use it when* necessary.

Button Mute Operation
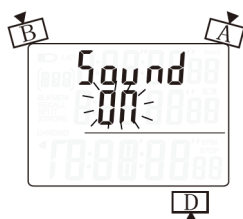
In the clock display interface, long press button B for 2 seconds to enter the setting of alarm, calendar clock and button tone ON/OFF, Sound select "ON" to indicate that there is a button tone in the button operation, Select "OFF" to mute the button operation.

LOW Battery Indication And Battery Replacement

When the battery power is insufficient, the low power symbol " 🔋 " is

displayed, and there is no backlight at this time, when the low battery symbol " 🔋 " flashes, there is no backlight and sound, and the timing can still normal.

When the low battery symbol " 🔋 " is displayed, the battery needs to be replaced CD.

1. Loosen the screws on the back cover and remove the back cover(products without battery door) or screw out the battery door on the back cover.

2. Take out the old battery, install a new CR2032 lithium battery upward according to the direction of Battery "+", cover the back cover and tighten the screws (products without battery door) or replace the battery door and tighten it.

Restore Factory Settings

In any display mode, press and hold the four button A, B, C and D at the same time to reset the full display and enter the clock display.

Cut-off the Display

1. When the stopwatch is during transportation or in stock, the display can be set at CUT-OFF to save the battery.

2. In clock mode, press button A and B together for more than 3 seconds, the middle row displays "OFF" and rings once indicating off. All other functions are reset except the normal running time of the clock.

3. In the mode of CUT-OFF, press any button for more than 2 second to open the display automatically.

Display Contrast Control
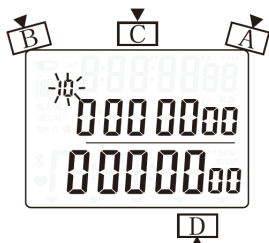
1. In clock mode, press C button for 3 seconds to enter the display contrast control.

2. The contrast control digits in the 1st row is blinking, the second and third row display zero, press A to advance, press B to reduce, the adjustment range is 1 ~ 15. If no operation in 1 minute, or press C, it will exit the contrast control. And the default contrast control is 10.

Care and Maintenance

1. The stopwatch is designed to withstand accidental contrast with water such as splashes or rain, but it is not designed for use in water. Do not operate the buttons when the stopwatch is wet.

2. The operation temperature range is-5°C ~ 50°C, Do not leave your stopwatch under direct sunlight or in very high temperature for a long time, the display may become black. Do not leave your stopwatch in very low temperature as this may cause a slight time loss or gain and the change of digits becomes slow. In both cases, the above conditions will be corrected when the stopwatch return to normal temperature.

HART

SPORT

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3. The stock environment needs to be ventilated and dry with the temperature range 5°C ~35°C, relative humidity less than 70%. Please avoid stocking thestopwatch together with other goods of corrosive gas.

4. The integrated circuit in your stopwatch can be affected by static electricity. If the static electricity is very strong, a permanent damage can occur. Be careful of the screen of the TV set and the wearing of clothing made of synthetic material in dry weather, in such case a very strong static electricity can be generated.

5. Be careful not to drop your stopwatch or hit it against hard surface, as it may cause a mechanical damage.

6. Do not expose your stopwatch to solvents such as gas-online and alcohol, spray of cosmetics, cleaners, paints etc., as they may cause damage to the stopwatch.