Robic SC-848W OPERATING INSTRUCTIONS

THANK YOU for buying the Robic SC-848W-300 Memory Speed-Chrono Countdown Timer. Your purchase brings you a reliable, World-Class Timer which measures performance for a wide array of sports and many other activities.

In order to ensure that you receive the maximum enjoyment from your SC-848W: BEFORE USING, PLEASE TAKE A MOMENT TO REVIEW THIS OPERATION GUIDE TO FULLY UNDERSTAND HOW YOUR TIMER WORKS. Then you can enjoy its many features which include:

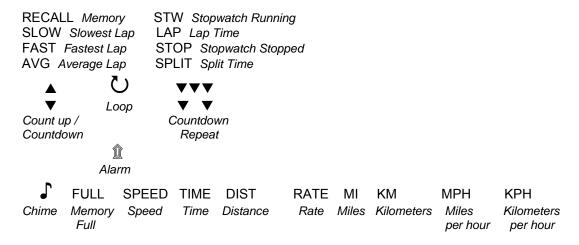
- EL backlight illuminates entire display
- 300 dual split memory recall
- 1/100 second precision to 100 hours
- User selectable running lap or split time
- Automatic lap counter to 999
- Stroke Rate Calculator displays strokes per minute
- Speed timer in MPH/KPH
- 300 memory recall of lap speed, time and number
- Advanced countdown timers show time remaining
- Water Resistant to 30 meters
- Break-Away Safety Lanyard helps prevent accidents, promotes safe use
- Dual countdown timers
- Ten year warranty; Lithium battery CR-2032

PART 1 PUSHBUTTON AND INDICATOR LOCATION AND OPERATION

The following illustration details the location of pushbuttons for setting and operating the SC-848W.



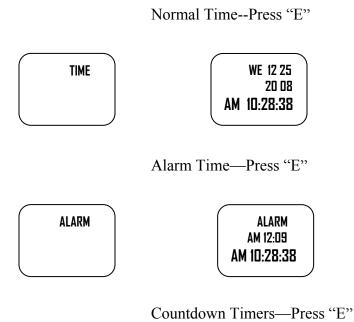
Indicators are located between the Middle and Lower rows of the display. Indicators help you identify what functions are currently in use on the SC-848W. They will appear (or flash in some cases) when an associated function or mode is activated.

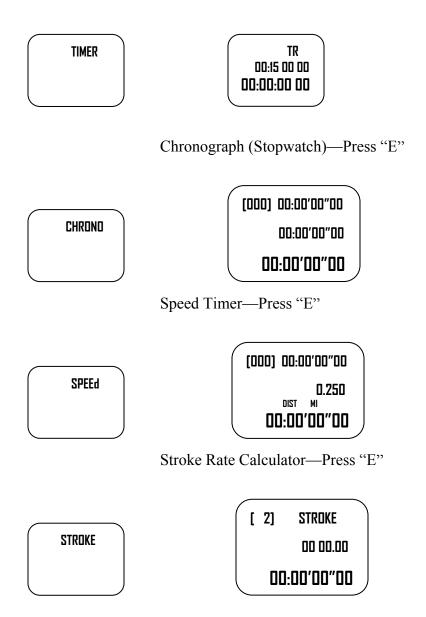


MODE SEQUENCE

The SC-848W has six primary modes of operation: Normal Time, Alarm, Countdown Timers, Chronograph (Stopwatch), Speed Timer and Stroke Rate Calculator.

They are displayed in this sequence by pressing (E). The name of the Mode will be displayed for 1-2 seconds and then the actual function will appear.





EL BACKLIGHT OPERATION

Pressing "C" or "D" at any time during any operation will activate the Electro-Luminescent (EL) Backlight function for viewing at night and in low light or no light situations.

Once pressed, the EL backlight will illuminate the display for three (3) seconds with a light blue back lighting.

IMPORTANT:

Please use the EL backlight as required, but note it will reduce the product's battery life.

AUDIBLE BEEP CONFIRMATION-HOURLY CHIME

While in the Normal Time mode, Press "A" to arm and disarm the Hourly Chime. The Chime symbol (\mathcal{L}) will appear when armed or disappear when disarmed.

When the Hourly Chime is armed, the SC-848W will sound a Beep tone any time a pushbutton is pressed. You may silence the tone by disarming the Hourly Chime.

The Hourly Chime can be armed to sound two beeps at the top of each hour. The Chime indicator (\mathcal{J}) will appear when the chime is armed.

PART 2 NORMAL TIME OPERATION

The starting point for operating your timer is NORMAL TIME. If NORMAL TIME is not displayed, press "E" until it appears. TIME indicator appears.

TIME WE 12 25 20 08 AM 10:28:38

To begin the setting process, press and hold "E" until Seconds begin to flash and SET appears in the upper row of the display.

NORMAL TIME SECONDS: Press or hold "A" to reset to all zeros.

NORMAL TIME HOURS: Press "B" and normal time hours appear flashing. Press or hold "A" to advance.

NORMAL TIME MINUTES: Press "B" and normal time minutes appear flashing. Press or hold "A" to advance.

YEAR SETTING: Press "B" and year appears flashing. Press or hold "A" to advance.

MONTH SETTING: Press "B" and the month (1-12) digits appear flashing. Press or hold "A" to advance.

DATE SETTING: Press "B" and date (1-31) appears flashing. Press or hold "A" to advance.

DAY SETTING: The day of the week will set automatically after the year, month and date are entered...MO (Monday), TU (Tuesday), WE (Wednesday), TH (Thursday), FR (Friday), SA (Saturday) and SU (Sunday).

US/EU SETTING: You may choose to display the time of day and calendar in either US or European formats by pressing "B". Press "A" to select US or EU.

After setting, press "F" to exit the setting mode. All digits (except seconds) will appear frozen.

12/24 HOUR OPTION: The time may be set to operate in AM/PM (hours 1-12) or on a 24 hour basis (hours 0-24). To select the (12) or (24) hour option, press "B"

NOTES:

- (1) You may complete the setting process at any point by pressing "E" or "F".
- (2) If you wish to set any particular function (time, calendar) press and hold "F" for three (3) seconds. Then press "B" until that digit (s) appear(s) flashing. Press "A" to advance that function, then press "F" to complete the setting process.
- (3) "Smart" Calendar: After setting the calendar, the SC-848W will automatically adjust after the last day of each month to the first day of the next month, taking into account months with fewer than 31 days.

PART 3 ALARM TIME OPERATION

From Normal Time, press "E" once. The ALARM TIME mode will appear.



While in ALARM TIME mode, press and hold "F" for 2-3 seconds. SET indicator appears. Alarm hours will begin flashing. Advance Alarm Hours by pressing or holding "A". After setting Alarm Hours, Press "B". Alarm Minutes will appear flashing. Advance by pressing or holding "A". The alarm will automatically be armed (set to go off) after the Alarm Time is adjusted.

Pressing "F" at any time, will automatically exit the setting procedure. SET indicator disappears. Press "A" while in Alarm Time to arm or disarm the Alarm.

Time of Day and Alarm Time will both be presented in the AM/PM or 24 Hour format chosen. "A" or "P" will appear in the AM/PM format.

The Alarm can be armed (set to go off) to sound once per day. The Alarm symbol "1" will appear when the alarm is armed.

When armed, the alarm will sound when the Alarm Time coincides with Time of Day. You may silence the alarm by pressing any pushbutton.

PART 4 COUNTDOWN TIMER(S) OPERATION

From NORMAL TIME, press "E" twice. The Countdown TIMER mode will appear.

TIMER

TR 00:15 00 00 00:00:00 00

The SC-848W provides three separate Countdown Timer options:

Countdown and Count up: Counts down from the preset time and then counts up. Loop Timer: Automatically repeats the preset time up to 99 times.

Training Timers: Input up to nine separate preset times to countdown in sequence.

Upon entering the TIMER mode, you may select the option you seek by pressing and holding "B" for three (3) seconds. Each option will appear with the respective indicators (refer to Part 1).

Countdown and Count up: TR appears in the top row of the display.

To set: Press and hold "F" for 2-3 seconds. SET appears flashing and Countdown Hours flash. Press "A" to advance hours. Repeat this process for Minutes and Seconds. Press "F" again to exit setting.

Start the Countdown by pressing "A". Time will count down in 1/100 second format. You may stop and restart time counting down by pressing "A" when necessary. Upon completion, the timer will sound a signal and begin counting time up as a stopwatch. Stop the Stopwatch by pressing "A" twice and then holding "B" for three seconds to reset to the Preset time and sequence into the next option.

Loop Timer: (000) and TR appear in the top row as does the loop indicator. Set the Preset as instructed in above paragraph. Press "A" to begin the Countdown Timer. Upon completion of the first loop sequence, press "A" twice to stop the time counting down. After countdown time is complete, a signal will sound and the SC-848W will immediately begin the countdown sequence again. Press and hold "B" for three seconds to reset the timer and sequence to the next option.

The number of completed times is recorded in the Counter on the top row, up to 99.

Training Timers: (000) / 01 TR 1 appears in the top row and the Repeat (down arrows) indicator. Press "F" to select from timers 1 though 9. You may preset up to 9 separate times (channels) which will countdown sequentially. Once selected, set the preset time by pressing and holding "F" for 2-3 seconds. TR and the timer number (for example, "3") begin to flash. Advance to the timer number by pressing "A".

Press "B" again and Hours begin to flash. Advance hours by pressing "A". Repeat this sequence for Minutes and Seconds. Once the time is entered, you may select another timer number to set or exit the setting sequence by pressing "F".

After you have entered the preset times, start your Training Timers by pressing "A". The timers will sequence through each channel, with an audible beep signaling the end of the previous segment. You may skip channels if no time value is entered. For instance, if you have times input in channels 3, 5, 6 and 9, the SC-848W will go from one to the next and ignore 1,2,4,7 and 8.

Times may be preset from one second to 100 hours.

PART 5- CHRONOGRAPH (STOPWATCH) OPERATION

From NORMAL TIME, press "E" three times to enter the CHRONO mode. STW, LAP, STOP and SPLIT indicators appear.



The "stopped" chronograph (stopwatch) display will appear as shown above. If not, press "A" to stop and "B" for 2-3 seconds to reset the display to all zeros.

The working range of the chronograph is one hundred hours, with a resolution of 1/100 second. The chronograph measures lap and split time, simultaneously. You may set Row 3 to present either running Lap or running Split (accumulated) time.

(NOTE: **You cannot operate the chronograph when the speed timer is not reset to all zeros**. To stop the speed timer, enter the speed mode. Stop timing by pressing "A" once. Press "B" for two seconds until the timer is reset to all zeros. Once the speed timer is stopped, you may enter and use the chronograph.)

Select Lap or Split in Row 3:

While the chronograph is reset to all zeros, press and hold "B". LAP or SPL indicator will appear flashing. Select between LAP and SPLIT by pressing "B".

Selecting SPLIT will cause the timer to display the accumulated running time from the start of the event in Row 3.

Select Recall Up or Down

While the chronograph is reset to all zeros, select Memory recall as Ascending (1,2,3,...300) or Descending (300,299,298...3,2,1) order by pressing "F". When Descending is selected, the down arrow (∇) will appear. If Ascending is selected, the down arrow will disappear.

Timing Single Lap Events

Start timing by pressing "A". Stop timing by pressing "A" again. Reset to zeros by pressing "B" for two seconds.

Timing Multiple Lap/Split Events

If chrono is running, reset time by pressing "A" to stop the chronograph and "B" for two seconds to reset to all zeros.

TO START: Press "A" and the timer will begin to run (RUN indicator appears.).

TO TAKE LAP/SPLIT READING: Press "B" to take as many lap/split readings as necessary. The SC-848W will take up to 1000 readings. The reading number will appear in the Lap Counter brackets on the left of the top row.

TO STOP TIMING: Press "A", STOP indicator appears. Press "B" for two seconds to reset to zeros or use the Advanced Functions described below.

ADVANCED FUNCTIONS

Your SC-848W has a 300 Dual LAP/SPLIT memory, as well as Fastest, Slowest and Average Lap Time display. You may use these advanced functions, anytime, during or after timing the event, as long as the display is not reset to all zeros.

MAX/SLOW/AVERAGE LAP TIME will be displayed when pressing "F". The MAX, SLOW and AVG indicators and lap number will appear, respectively.

Max, Slow and Average lap data can be displayed during or after event timing and prior to resetting the display to all zeros.

<u>300 DUAL MEMORY</u>: Your timer has the capability to recall the previous 300 completed lap and split times through 1000 laps. (300, 299, 298, etc.) at any time, whether running or stopped - RECALL indicator will appear.

To use memory recall, when the timer is running, press or hold "F" and the recall indicator appears along with the individual lap and split times.

To use memory recall after the timer is stopped and the display has not been reset to all zeros, proceed as follows:

Press or hold "F" to retrieve memory data. To reset the timer to all zeros, press "E" (RECALL indicator disappears) and then press "B" for two seconds until all zeros appear.

<u>NOTE</u>: When the chronograph is stopped, you cannot retrieve memory or other time data if the display has been reset to all zeros. Always retrieve memory recall and/or FAST/SLOW/AVG time data prior to resetting the chronograph.

TIME OUT: Your chronograph has a time-out feature. If the event being timed is stopped for any reason, press "A" to stop timing, restart by pressing "A". All previously recorded data will be stored in memory (up to 300 laps).

Part 6 SPEED TIMER OPERATION

The Speed Timer will compute and display speed in MPH/KPH as a function of distance and time. To enter the Speed Timer mode from normal time, press "E" four times. If the Speed Timer is running, stop timing by pressing "A" once. Reset the display to all zeros by pressing "B" for two seconds. The display will show:



The Speed Timer will not operate unless the Chronograph is stopped and Reset to all zeros. STOP indicator will appear.

How to Determine and Enter the Distance.

The first step is to enter the distance correctly. The speed timer **will not work** unless a distance is entered.

Distance is entered as the decimal equivalent of a mile or kilometer from 000.001 to 999.999. For example, enter 2 ½ miles/kilometers as 002.500, 1/3 as 000.333, 1/8 as 000.125, etc.

You may convert feet to the decimal equivalent of a mile, i.e., 187 feet is entered as 000.035 (187 divided by 5280 = 000.035)

Convert meters to kilometers as follows: 230 meters is entered as 000.230 (230 divided by 1000 = 000.230).

Enter Distance.

To enter the distance when the timer is stopped and reset to zeros, press and hold "F" for three (3) seconds until SET appears in the bracket on the top row of this display and UNIT appears flashing above the upper row of digits in the display.

MI or KM will also appear flashing between the middle and lower rows of the display. Press "A" until the desired unit of measurement (mile or km) appears. Press "B" and the first digit of the distance value located in the middle row (000.000) appears flashing. Advance the digit (0-9) by pressing or holding "A" until the desired

value appears. Once set, move to the second digit by pressing "B". Change the second digit by pressing "A".

Continue to set each digit on the distance scale until you have entered the correct distance. Press "F" to exit the distance setting process. The distance set will appear in the middle row without any digits flashing.

NOTES:

- (1) Should you need to set any particular digit on the distance scale, press "F" until SET "mile" or "km" appears flashing. Then press "B" until the correct digit appears flashing. Change the digit(s) by pressing "A". To exit the setting procedure, press "F"
- (2) The maximum setting distance is 999.999 miles or kilometers.
- (3) The speed timer will not work unless a distance has been entered.

Select Recall Up or Down

While the Speed Timer is reset to all zeros, select Memory recall as Ascending (1, 2,3,...300) or Descending (300,299,298...3,2,1) order by pressing "F". When Descending is selected the down arrow (▼) will appear. If Ascending is selected, the down arrow will disappear.

One Lap Event (START/STOP/RESET)

START: Press "A" to start the timer. RUN and LAP indicators appear. Time appears running in Row 3.

STOP: Press "A" again to stop the timer. The "Stop" indicator appears. RESET (all zeros): To return the timer to the start position, press "B" for 2 seconds.

IMPORTANT NOTICE--- "ERROR" INDICATOR

When taking a speed reading and ERROR appears in the middle row, you have exceeded the speed capacity of the timer (999.999 mph/kph).

This occurs when you take a lap reading too soon, either by accident or on purpose, i.e. long distance and fast lap time. When this situation occurs, your timer is functioning properly and is still recording data. Wait until the lap is completed, then press "B" and the appropriate lap speed and time will appear on the display.

Multiple Lap Event Timing

When timing multiple lap events, the operating sequence is: START - LAP - STOP - RESET.

START: Press "A" to start. STW and LAP indicators appear and the time appears running in Row 3.

LAP: To take a lap reading, press "B" the instant the lap is completed. SPEED indicator appears. The lap number and time appear in Row 1, the lap speed in Row 2. The current

lap running time will appear in Row 3. Continue to press "B" for each lap reading as needed. Your SC-848W will take up to 1000 lap speed readings.

STOP/END OF EVENT: At the end of the event, press "A", STOP indicator appears. The speed and time of the last lap will appear in the display (lap number and time in the top row and speed in the middle row) and the lower row will show the last recorded lap time.

RESET: After you have completed timing and reviewing all information, press "B" for two seconds to reset the Speed Timer to all zeros.

ADVANCED FUNCTIONS: Your SC-848W speed timer is equipped with the advanced functions described below. You may use all the Advanced Functions during or after your timing of the event. Please review them carefully.

ADVANCED FUNCTIONS CANNOT BE USED IF YOU HAVE RESET THE DISPLAY TO ALL ZEROS.

Max - Slow - Average and Memory Recall

Your SC-848W has a 300 lap memory through 999 laps, as well as Fastest, Slowest and Average Lap Speed and Time display. To use these functions, press "F" anytime while in the Speed Timer Mode. The MAX indicator will appear above the top row.

Max - Slow - Average Lap Speed & Time

The MAX indicator means the Fastest Lap Time is shown in the top row and the associated Maximum speed of all readings taken is displayed in the middle row. The Fastest lap number is displayed in the LAP counter.

Press "F" again to display the SLOWEST Lap Speed, Time and Number. The SLOW indicator will appear.

Press "F" again, to display the Average Lap Speed and Time of all readings. The AVG indicator will appear. The Lap Counter will show the total amount of readings taken.

300 Memory Recall

After sequencing through the Fastest, Slowest and Average Lap information, press or hold "F" to review up to the previous 300 readings in speed, time and lap number up through 999 laps. The SC-848W will review in descending order (999, 998, 997, etc. . .).

The lap speed will appear in the middle row and the lap number and time will appear in the top row.

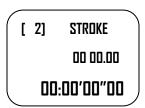
During Memory Recall use, you may press "E" at any time, to return to the current or previously taken readings.

To take another lap reading during use of the Advanced Functions, while the timer is running, simply press "B" and the next reading will appear.

Pressing "B" for 2 seconds anytime while in the STOP position will reset the Speed Timer to all zeros.

PART 7 STROKE RATE CALCULATOR

From NORMAL TIME, press "E" five times to enter the Stroke Rate Calculator Mode.



A stroke rate is determined by measuring the time it takes to complete a certain activity or set of actions and then calculating how many times that it will be completed in one minute. For example, if a swimmer completes three (3) strokes in 10 seconds, than the Stroke Rate Calculator will read 18 strokes per minute.

To operate the Stroke Rate Calculator, enter the number of strokes you wish to measure. You may input from 2 to 30 strokes. Make certain the calculator is reset to all zeros by pressing and holding "B" for 2 seconds.

To enter the number, press and hold "F" for 3 seconds. SET will appear flashing in the brackets and the value in the middle row will appear flashing. Then, press and hold "A" to advance. When you reach the stroke number you wish to use, press "F" to exit the setting procedure.

Start the Calculator by pressing "A". After the completion of the stroke (or activity), press "A" again. The time for the activity is displayed in the bottom row while the stroke rate per minute is displayed in the middle row of the display.