SC-554 Instructions

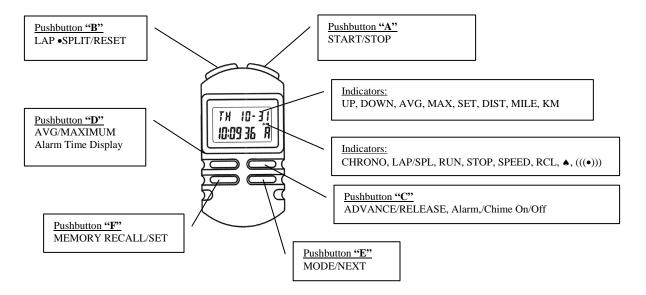
SC-554

Thank you for buying the Robic SC-554. Your purchase brings you a world class timer with a vast array of advanced timekeeping functions.

Please take a few moments to review this operating guide, so that you may become familiar with the SC-554's many capabilities and how you can best access them for your maximum benefit.

PART I PUSHBUTTON and INDICATOR LOCATION

The following illustration details the location of pushbuttons and indicators for setting and operating the SC-554.



The indicators in this illustration will appear only when a particular mode or function is activated by pressing a pushbutton.

Once you are familiar with the SC-554's operation, you will be ready to enjoy its many functions. The starting point for any operation is the NORMAL TIME mode. You may sequence through the modes by pressing "E".

NORMAL TIME

- > Time of Day in Hours, Minutes and Seconds
- Calendar with Day, Month and Date
- ➤ AM/PM or 24 Hour Time Options
- Daily Alarm and Hourly Chime

CHRONOGRAPH (Stopwatch)

Three (3) Timing Options

- (1) Lap Time Chronograph
- (2) Split (accumulated) Time Chronograph, or
- (3) Dual Lap/Split Time Chronograph

Each option offers these functions:

- ➤ 1/100 Second Resolution to 24 Hours
- ➤ Recall of the previous 30 time readings
- ➤ Automatic Lap/Split Counter . . . up to 999 readings
- ➤ Memory Recall Can be Presented in Either Ascending (1,2,3...) or Descending (...3,2,1) Order
- Fastest and Average Lap Time Display

STROKE RATE CALCULATOR

- > Used for swimming or rowing activities
- > Operates as a function of the Speed Timer
- > Calculates stroke rate for single, double or triple stroke cycle

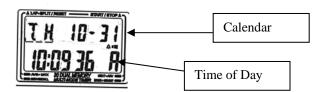
SPEED TIMER

- Computes Speed up to 1000 mph/kph
- Displays Lap Speed, Number and Time
- Memory Recall of up to Previous 30 Laps, in Ascending (up) or Descending (down) Order
- ➤ Automatic Lap Counter up to 999 Laps
- ➤ Enter Distance Precise to 1/1000 Mile or Kilometer
- > 1/100 Second Resolution up to 24 Hours
- Automatic (15 second) or Manual Release to Current Running Lap Time
- ➤ Average Lap Speed and Time Display
- Fastest Lap/Maximum Speed Display

Battery: Lithium type CR-2025 or equivalent

PART II NORMAL TIME OPERATION

Press "E" until NORMAL TIME appears.



Time of Day is presented in Hours, Minutes and Seconds in the lower row. Calendar is presented in Day, Month and Date, in the upper row.

Alarm Time Display

While in NORMAL TIME, press "D" to display the Alarm Time. "AL" will appear in the upper row of the display to indicate the Alarm Time.



Setting NORMAL TIME and ALARM TIME

While in NORMAL 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 "C". After setting Alarm Hours, Press "E". Alarm Minutes will appear flashing. Advance by pressing or holding "C".

Repeat the setting process for Seconds >>>> Hours >>>> Minutes >>>> Date >>>> Day of the Week >>>> 12/24 Hour Option >>>> and back to Alarm Hours.

Pressing "F" at any time, will automatically exit the setting procedure. "SET" indicator disappears.

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.

Using the Daily Alarm and Hourly Chime

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

The Hourly Chime can be armed to sound one (1) beep at the top of each hour. The Chime indicator (\blacktriangle) will appear when the chime is armed.

While your SC-554 is in NORMAL TIME mode, press "C" to arm, or disarm your alarm and chime. The sequence is:

- (1) Alarm ON, Chime OFF
- (2) Chime ON, Alarm OFF
- (3) Alarm ON, Chime ON
- (4) Alarm OFF, Chime OFF

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 III CHRONOGRAPH MODE (Stopwatch)

The SC-554's chronograph is a digital stopwatch with 1/100 second resolution, which will present timing in any of three (3) different options.

From NORMAL TIME, press "E" once to enter the CHRONOGRAPH mode. Chrono indicator "CHR" and all zeros should appear. If the display does not show all zeros, reset the chrono by:

If RUN appears, press "A" to STOP and "B" to RESET.

If STOP appears, simply press "B" to RESET to all zeros.

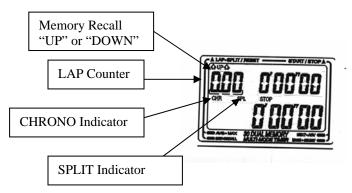
"LAP" Chrono will display the <u>Interval</u> of time from your previous readings. Each time a reading is taken, the timer begins from zero.

"SPLIT" Chrono will display the <u>Accumulation</u> of time from the start of the event. Each time a reading is taken, the timer shows the <u>Total</u> amount of time accrued.

"LAP/SPLIT" Chrono will display the Lap Time in the upper row and the Split Time in the lower row of the display.

General Operation

Select from the LAP, SPLIT or LAP/SPLIT options by pressing "C".



- Chrono in Split Time mode
- Chrono stopped in RESET position
- Memory Recall in ascending order "UP"

The appropriate indicator "LAP", "SPL" or "LAP/SPL" will appear.

MEMORY RECALL DIRECTION

Select between ascending (up) or descending (dn) memory recall by pressing "D" while Chrono is in the RESET (all zeros) position. The recall direction can only be selected while the Chrono is in the reset (all zeros) position. You cannot select between "UP" or "DN" while the time is running, or not reset.

30 MEMORY RECALL Operation

You may access up to the previous 30 readings while the Chronograph is running or stopped by pressing "F". The recall operation will ascend or descend, depending upon the option selected.

Simply press "F" at any time to review previous readings. Recall ("RCL") indicator appears. Holding "F" down, will scroll through the memory recall function.

If "RUN" indicator appears, you may take a reading by pressing "B" or stop the chrono by pressing "A" at any time while using the memory. You may also return to the last previous reading at any time, by pressing "C".

AVERAGE LAP TIME, MAXIMUM (FASTEST) LAP TIME:

The Average and Fastest Lap Times can be displayed at any time by pressing "D". "AVG" indicator will appear for Average Lap Time, and "MAX" indicator will appear for the Fastest Lap Time.

LAP CHRONOGRAPH Operation

In the Chrono mode, Press "C" until "LAP" indicator appears.

Single Events: Press "A" once to start. Press "A" again to stop. Press "B" to reset to all zeros.

Timing Multiple Laps: Press "A" to start. "RUN" indicator appears, Lap Time appears running in the lower row. Press "B" to take a Lap Time. The previous Lap Time will appear in the upper row of the display and the current Lap Time will build up from zero in the bottom row. The SC-554 will take up to 999 lap times. The LAP COUNTER will increase by one (1) each time "B" is pressed to take a Lap Time.

Press "A" to stop, "STOP" indicator appears. LAP COUNTER will increase by one (1) when timer is stopped. Press "B" once to display total accumulated time of the event. Then press "B" again to reset to all zeros.

For MEMORY RECALL and AVG/MAX operations, please proceed as described above.

SPLIT CHRONOGRAPH Operation

In the Chrono Mode, press "C" until Split "SPL" indicator appears.

Single Events: Press "A" to start. Press "A" again to stop. Press "B" to reset to all zeros.

Timing Multiple Splits: Press "A" to start. "RUN" indicator appears and time is shown running in the lower row of the display. Press "B" to take a Split time. The Split time appears in the upper row of the display, while the accumulated running time appears in the lower row. The LAP COUNTER will increase by one (1) each time "B" is pressed. The SC-554 will take up to 999 Split times.

Press "A" to stop. "STOP" indicator appears. LAP COUNTER will increase by one (1) when the timer is stopped. Press "B" once, to view the total accumulated time of the event. Then, press "B" again to reset your SC-554 Chronograph to all zeros.

LAP/SPLIT Chronograph Operation

Please note that "LAP/SPL" is commonly referred to as "dual split" timing.

While in the Chrono (CHR) mode, press "C" until "LAP/SPL" indicator appears.

Single Events: Press "A" to start. Press "A" again to stop. Press "B" to reset to all zeros.

Timing Multiple Dual Splits: Press "A" to start. "RUN" indicator appears. Time is shown running in both the upper and lower rows of the display. LAP COUNTER will show "001" indicating this is the first segment.

Press "B" to take a Dual Split time reading. The time reading will appear frozen in the upper and lower rows of the display. You may press "E" to release the frozen display to the current running LAP and SPLIT times, or the SC-554 will automatically do so after 15 seconds.

Upon releasing the frozen time display, the LAP COUNTER will increase by one (1) to indicate the second segment is now displayed.

The SC-554 will take up to 999 Dual Split readings. You may recall up to the previous 30 at any time by pressing "F".

To stop the Chrono, press "A", then, press "B" to reset to all zeros.

NOTES:

- After 24 hours or 999 laps, the chronograph will cease operation.
- ➤ The time value in the upper row will have 1/100 second resolution for the first 60 minutes. After 60 minutes, it will have one (1) second resolution up to 24 hours. The time value in the lower row will have 1/100 second resolution for up to 24 hours.
- ➤ If no pushbutton is pressed for 15 seconds, the SC-554 will return to the last previous time value if MEMORY RECALL and AVG/MAX functions are activated.

PART IV SPEED TIMER Operation

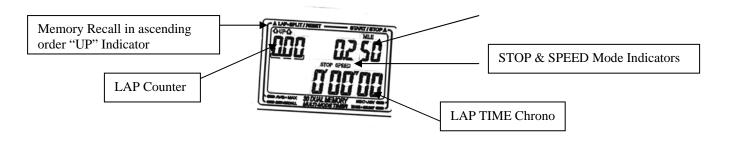
The Speed Timer will compute and display speed in MPH or KPH as a function of distance and time.

To enter the SPEED mode from NORMAL TIME, press "E" twice. Should numbers other than all zeros appear in the lower row of the display.

- (1) If the "STOP" indicator appears, press "B" to reset to all zeros
- (2) If the "RUN" indicator appears, press "A", then "B".

The SPEED TIMER will NOT operate unless a distance has been entered.

<u>Distance Entered:</u> 0.250 Mile (1/4 mile)



How to Determine and Enter the Distance

The first step is to enter the distance correctly.

The SPEED TIMER will not operate 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 $2\frac{1}{2}$ miles or kilometers as 002.500, 1/3 as 000.333, 1/8 as 000.125, etc. (To calculate the decimal equivalent of a fraction, simply divide the numerator by the denominator . . . for $\frac{3}{4}$, 3 divided by 4 is 000.750.) Some common distances in decimal form are:

1/10 = 0.100	1/8 = 0.125	1/6 = 0.167	1/4 = 0.250	1/3 = 0.333
3/8 = 0.375	1/2 = 0.500	5/8 = 0.625	2/3 = 0.667	3/4 = 0.750

You may convert feet to the decimal equivalent of a mile, i.e. 187 feet is entered as 000.035 (187 divided by 5280 feet (1 mile) = 0.035). Some commonly used distances reported by feet are:

Water Ski Slalom Course: 850 feet = 0.161 mile
Pitcher's Mound/Baseball: 60.5 feet = 0.011 mile
Pitcher's Mound/Youth: 47 feet = 0.009 mile
Pitcher's Mound/Softball: 45/47 feet = -.009 mile

Convert meters to kilometers by dividing by 1000. For example, 230 meters is entered as 0.230 km. (230 divided by 1000).

Entering the Distance

The SC-554 can accommodate distances between 000.001 and 999.999 mile/kilometer.

After determining the distance, press and hold "F" for three (3) seconds, "SET" and "DIST" appear. The "MILE" or "KM" indicator will appear flashing. Press "C" to select between miles or kilometers. Then press "E".

The hundreds of miles digit appears flashing. Advance the hundreds of miles digit while flashing by pressing or holding "C".

Repeat pressing "F" to select and "C" to advance for tens, units, tenths, hundredths and thousandths. Exit the setting sequence at any time by pressing "E". "SET" and "DIST" indicators disappear.

Please note:

- (1) The SC-554 returns to the reset position if no pushbuttons are pressed within 15 seconds.
- (2) If hundreds and tens digits have no value entered, they will disappear after you have entered the distance.

Stroke Rate Calculation

You may calculate stroke rate based on one, two or three stroke cycles. Since we are not interested in MPH/KPH, we will disregard those indicators.

Following the instructions in the "Enter Distance" section, please enter the following values for their respective stroke cycles:

One (1) stroke cycle . . . please enter 0.017 Two (2) stroke cycles . . . please enter 0.034 Three (3) stroke cycles . . . please enter 0.050

To measure stroke rate, simply START the timer by pressing "A" at the beginning of the cycle and STOP the timer by pressing "A" again at the completion of the cycle. The number displayed in the upper row of the display is the **Stroke Cycle Rate per Minute**.

Take as many readings as necessary. The Average and Fastest rates can be displayed by pressing "F".

OPERATING THE SPEED TIMER

MEMORY RECALL DIRECTION

Select between ascending "UP" or descending "DN" memory recall direction by pressing "D" while the Speed Timer is in the reset position.

The recall direction cannot be selected while the Speed Timer is running or not in the reset position.

(1) For Single Lap Events: Press "A" to start. "RUN" indicator appears. Press "A" again to stop the timer. "STOP" indicator appears. The speed will appear in the right side of the upper row of the display and the time will appear in the lower row of the display.

Press "B" to reset to all zeros.

(2) For Multiple Lap Events: Press "A to start, "RUN" indicator appears. Press "B" to take Lap readings. Lap Time will appear in the lower row of the display, Lap Speed in the upper row and Lap Number in the Lap Counter. Continue to press "B" to take as many lap readings as necessary. The SC-554 will record up to 999 laps.



The Lap Counter will increase by one (1), each time a Lap reading is taken.

The previous Lap Time will remain frozen in the lower row for 15 seconds, at which time it will automatically release to the current running lap time. Or, you can manually release the time by pressing "C".

After pressing "B", should "ERROR" appear in the upper row, followed by five (5) beeps, you have exceeded the timer's measuring capability of 1000 mph/kph. When this occurs, the Lap Time continues to run. To correct the error, simply press "C" to return to the previously recorded lap. Then press "B" to take the appropriate lap readings.

Upon completion of the event, or to stop the Speed Timer at any time, press "A". "STOP" indicator appears and one (1) is added to the Lap Counter.

Then, press "B" once, to display the accumulated time and again to reset to all zeros.

AVERAGE, MAXIMUM and MEMORY Functions

The MAXIMUM SPEED/FASTEST LAP reading can be displayed at any time, by pressing "D". The "MAX" indicator will appear, as will the lap number, speed and time of the fastest lap. To return to any previous function, press "C" or the SC-554 will automatically do so after 15 seconds.

The AVERAGE SPEED and TIME of multiple laps, up to 999, can be computed and displayed at any time, by pressing "D", again. "AVG" indicator appears and the average lap time will appear in the upper row of the display, along with the total number of laps completed.

30 MEMORY RECALL of lap speed, time and number can be displayed at any time, up through 999 laps, by pressing "F". Recall "RCL" indicator appears. Holding "F" down, will cause the previous readings to be displayed at a rate of one per second.

If the "RUN" indicator appears, you may take another Speed reading at any time, by pressing "B". You may also instantly return to the last previous reading at any time by pressing "C".

The memory recall operation will review previous readings in ascending "UP" or descending "DN" order, depending on the option selected.

NOTES:

- (1) The SPEED TIMER will not operate unless a distance has been entered.
- (2) The SC-554 will measure up to 24 hours or 999 laps.

LIMITED WARRANTY OUR BASIC POLICY

Marshall-Browning International Corporation (MBI Corp.) warrants to the original owner, this quartz digital liquid display timepiece (excluding battery, lens, band, or strap) for the period of one year from the original purchase date. This limited warranty is given by MBI Corp. and not by the dealer from whom the timepiece was purchased.

THE WARRANTY PROCESS - WHAT IS COVERED BY THE WARRANTY

If the timepiece develops a manufacturing defect within the one-year limited warranty period, it will be either repaired or replaced (at MBI Corp.'s option) with a timepiece of equal or greater value, providing the original owner submits the following:

- 1. Proof of purchase, i.e. a validated store receipt showing date of purchase.
- 2. A check or money order (no cash, please) in the amount of \$6.50 to cover the cost of shipping and handling.

WHAT IS NOT COVERED BY THE WARRANTY

- A. MBI Corp. will **not** repair defects or damages caused by or showing evidence of:
 - 1. Improper or unauthorized service.
 - 2. Misuse, tampering, abuse, or mistreatment of the timepiece.
- 3. Damage to the case or visible cracking of the lens.
- 4. Moisture damage, if the product is a non-water-resistant timepiece.
- B. If we find that the battery is the cause of the defect, MBI Corp. reserves the right to charge you (\$6.50) for a new replacement.

MBI Corp. is not liable for incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

YOUR RIGHTS UNDER IMPLIED WARRANTIES AND STATE LAW.

MBI Corp. limits the duration of any warranty implied by state law, including the implied warranty of merchantability, to one year from the date of original purchase. Some states do not allow limitations on how long an implied warranty lasts, so the above

limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

CARING FOR YOUR TIMEPIECE

Proper care of your timer will provide many years of enjoyment. We recommend that: 1. The battery be replaced at once when it becomes depleted. Please ask your local retailer to replace the battery for you using a **CR2025** (**Lithium**) or equivalent. 2. The lens be replaced immediately if it becomes damaged, as contamination from dust, moisture, and other foreign substances will damage the module. 3. If the timepiece is not marked "water-resistant," avoid immersing or exposing it to water, steam, or other forms of moisture.

WHEN YOU REQUIRE SERVICE

If your timepiece ever requires factory servicing, you can send it directly to: MBI Corp., 115 Hurley Road, Oxford, CT 06478

We strongly recommend that when sending it through the mail, you send the product insured, return receipt requested, so that if a problem in shipping arises, you can trace it through the originating post office. You will be billed for all services performed deemed out of warranty; and since we reserve the right to substitute with a replacement product of equal or greater value, NEVER include a personal item, such as a watchband, with the repair request.

Robic offers a complete line of the world's finest timers and stopwatches for all your needs. Please call at (203) 264-2702 for a free catalog.