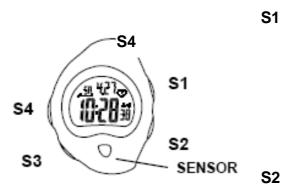**OPERATING INSTRUCTION FOR SC-594**

**(A) FEATURES**
The SC-594 is a multi-function watch designed to have Chronograph, Count Down Timer, Alarm and Pulse Rate Monitor. The main features are listed as follow:



- 6 modes of operation: Normal Time, Pulse Rate Monitor, Chronograph, Timer, Alarm and Safety Range Set.
- Normal Time presents Hour, Minute, Second, Weekday, Month and Date.
- 12/24 Hr display format.
- Pulse Rate monitor with "Safety Range" and "Warning Sound".
- 1/100-second Chronograph with split function up to 100 hours.
- Daily alarm which can be set to sound for 20 seconds.
- Hourly chime signal at the top of each hour.
- 1-second resolution Count down Timer with working range from 1 minute to 19 hours 59 minutes. User option for Count Down Stop, Count Down Repeat and Count Down/ Up function.
- 3 seconds light up EL back light.

**(B) EL BACK LIGHT**
Press button S1 for EL back light with 3 seconds auto light up.

**(C) BASIC OPERATION OF BUTTONS**



S1: - EL BACK LIGHT
    - START/STOP OF CHRONOGRAPH
    - TIMER START/STOP
    - ADVANCE SETTING DIGITS (SET)
S2: - SET (PRESS & HOLD)
    - ENTER/EXIT PULSE RATE MONITOR MODE
    - EXIT SET (SET)
S3: - MODE CHANGE
    - SELECT SETTING DIGITS (SET)
S4: - SPLIT/RESET OF CHRONOGRAPH
    - RELOAD PRESET TIMER TIME (TIMER STOPPED)
    - SELECT TIMER FUNCTION (TIMER RELOADED/RESET)
    - ALARM AND CHIME ARM/DISARM
    - TOGGLE "AGE" & "SAFETY RANGE" DISPLAY

A word about the SC-594 and Pulse estimation

The SC-594 is a simple detector meant to offer general guidance as to the Pulse Rate of a person at a given moment in time.  This is not a medical device and it should not be viewed as offering any sort of physical indication, prescription, or protection.  Each person makes their own decisions about their health and the information they deem of value should be obtained from a licensed Medical Professional.  Above all else, refer to your Doctor or Health Care professional for guidance as to the exposure to exercise or day to day events which are safe for you and your family.
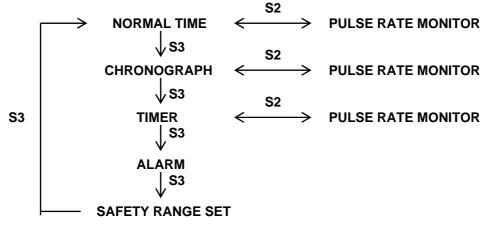
The Pulse Rate is an indication of the number of times a heart beats during a period of time.   We will estimate the approximate number of times it will beat in a minute.  Both internal and external factors can affect this rate, including but not limited to Stress, Smoking, Exercise, Eating, rate of breathing, and Air Temperature.  The SC-594 will have difficulty obtaining a Pulse Rate for those people having an irregular heart beat or cardiovascular deficits.

These calculations are for general reference and should not be considered as a diagnosis or any sort of medical indication.

## (D) MODE CHANGE OPERATION



Press button S3 for mode change operation. The sequence is shown as follow:
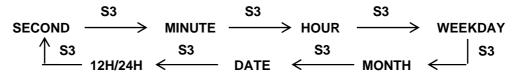


## (E) HOW TO SET NORMAL TIME



- Press button S3 to show Normal Time mode, weekday displayed in the bracket.
- Press & hold button S2 for 3-4 seconds to enter setting mode. The second digits start flashing.
- With each press of button S1, the selected digits, weekday or 12H/24H to be adjusted (flashing) can be made. Press & hold button S1 for fast setting.
- With each press of button S3, next digits, weekday or 12H/24H for setting can be selected. The sequence is shown as follow:
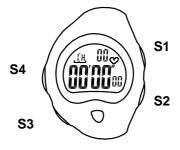
```
             S3                S3               S3
SECOND  ─────────→  MINUTE  ─────────→  HOUR  ─────────→  WEEKDAY
    ↑  S3              S3              S3              │  S3
    └──────  12H/24H  ←──────  DATE  ←──────  MONTH  ←──┘
```

 - After all adjustments are completed, press button S2 to exit the setting mode.
Remark:
1. When the seconds digits count between 30 to 59 and the button S1 is pressed while in setting mode, the seconds are reset to 00 and one minute is added.
2. If 24 Hr display format is selected, there is no AM flag "A" or PM flag "P".
3. If there is no button operation for 2-3 minutes in setting mode, the watch will return back to Normal Time mode automatically.
4. Press button S2 to enter or exit Pulse Rate Monitor mode.


## (F) HOW TO USE CHRONOGRAPH



- Press button S3 to show Chronograph mode, "CH" displayed in the bracket.
- Press button S1 to start the chronograph, "RUN" will be displayed.
- Press button S4 to take split times ("SPL" displayed), the display will freeze at total accumulated time for about 10 seconds, then the display will return to the current running time automatically. Press button S3 for fast escape.
- Press button S1 to stop the chronograph. Then press button S1 to start the chronograph again or press button S4 to reset the chronograph to 00'00"00.
Remark:
1. The chronograph is with 1/100-second resolution up to 100 hours.
2. Press button S2 to enter or exit Pulse Rate Monitor mode.
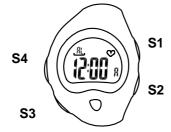

## (G) HOW TO USE THE COUNT DOWN TIMERS



- Press button S3 to show Timer mode, "CS", "Cr" or "CU" displayed in the bracket.
- Press button S4 to select Count Down Stop "CS", Count Down Repeat "Cr" or Count Down /Up "CU" function.
- Press & hold button S2 for 3-4 seconds to enter setting mode. The minute digit start flashing.
- With each press of button S1, the selected digits to be adjusted (flashing) can be made. Press & hold button S1 for fast setting.
- Press button S3 to select minute or hour digit for setting.
- After all adjustments are completed, press button S2 to exit the setting mode.
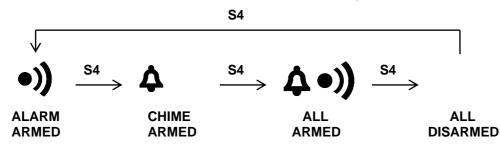- Press button S1 to start the timer.
Remark:
1. The count down timer is with 1-second resolution and with working range from 1 minute to 19 hours 59 minutes.
2. The watch will give out 5 "BEEP" at 5 minutes, 3 "BEEP" at 3 minutes and 1 "BEEP" at 1 minute, 5 sec., 4 sec., 3 sec., 2 sec. and 1 sec. before the timer count down to zero. And the watch will beep for 1-2 seconds when the timer count down to zero.
3. If there is no button operation for 2-3 minutes in setting mode, the watch will return back to Timer mode automatically.

4. Button S1 is for starting or stopping the timer.
5. Button S4 is for reloading preset timer time when timer is stopped, or selecting timer function when the timer is reloaded or reset.
6. "REP" is displayed if Count Down Repeat function is selected.
7. Press button S2 to enter or exit Pulse Rate Monitor mode

## (H) HOW TO USE THE ALARM



- Press button S3 to show Alarm mode, "AL" displayed in the bracket.
- Press & hold button S2 for 3-4 seconds to enter setting mode. The minute digits start flashing.
- With each press of button S1, the selected digits to be adjusted (flashing) can be made. Press & hold button S1 for fast setting.
- Press button S3 to select minute or hour digit for setting.
- After all adjustments are completed, press button S2 to exit the setting mode.
- Press button S4 to arm or disarm the alarm and chime function in the sequence shown as follow:



| ALARM ARMED | CHIME ARMED | ALL ARMED | ALL DISARMED |

Remark:
1. The alarm sounds daily for 20 seconds at alarm time if the alarm function is armed. Press any button to stop the alarm sound.
2. The watch gives out a "BEEP" sound at every full hour if the chime function is armed.
3. The alarm function is automatically armed when enter setting mode.
4. If there is no button operation for 2-3 minutes in setting mode, the watch will return back to Alarm mode automatically.
5. If 24 Hr format is selected, there is no AM "A" or PM "P" flag.

## (I) HOW TO USE THE PULSE RATE MONITOR
To use the Pulse Rate measuring function, follow these steps:
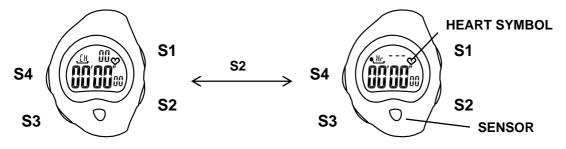(1) Set safety range of the Pulse Rate monitor



- Press button S3 to show Safety Range Set mode, "HI" displayed in the bracket.
- Press & hold button S2 for 3-4 seconds to enter setting mode. The lower limit "LO" digits start flashing.
- With each press of button S1, the selected digits, warning sound on/off to be adjusted (flashing) can be made. Press & hold button S1 for fast setting.
- With each press of button S3, next digits or warning sound on/off for setting can be selected. The sequence is Lower Limit "LO", Upper Limit "HI", Sound "Sd" on/off, Age and Level "LL".
- After all adjustments are completed, press button S2 to exit setting mode.
Remark:
1. Lower limit of safety range can be set from 30 to 239 (beats per minute).
2. Upper limit of safety range can be set from 40 to 249 (beats per minute).

3. The minimum interval between upper limit and lower limit of the safety range is 10 units. If the interval is less than 10 units, then the adjustments will be changed automatically.
4. If warning sound is turned on, the watch will beep when Pulse Rate is beyond the limits.
5. Age can be set from 1 to 99.
6. If "level -" is selected, user can set his own safety range and equated safety range is provided for "level 1" to "level 4".
7. If there is no button operation for 2-3 minutes in setting mode, the watch will return back to Safety Range Set mode automatically.
8. Press button S4 to toggle between the displays of "Age" and "Safety Range".
9. By entering setting mode in "Age" display, the setting sequence will be Sound "Sd" on/off, Age, Level "LL", Lower Limit "LO" and Upper Limit "HI".

(2) Activating the Pulse Rate measuring function of the watch



- In Normal Time, Chronograph or Timer mode press button S2 to enter Pulse Rate Monitor mode, "Hr" displayed in the bracket.
- Place your finger (preferably the index finger) upon the sensor located at the 6 o'clock position of the watch, do not press strongly, the watch will then response to the signal from the finger and display the current heart rate (beats per minute) in the upper row of the display, next to the bracket. It may take a few seconds before the detected Pulse Rate can be shown.

Figure 1                    Figure 2



### For best results of the Pulse Rate Monitor:

Do not attempt to take a reading while you are moving, walking or running.  It is best to be stationary since your index finger needs to be positioned over the sensor and should not be moved. You should be standing or seated, not lying flat or prone.

Lay the tip of your index over the sensor so that it is resting. See Figure 1 above.  Do not exert pressure or force your finger down on the sensor.  Your index finger is best since it usually has less fatty tissue.  Do not use your thumb or other fingers.

Raise your arm to heart level bending your elbow 90°.  Lay your finger tip so it is parallel with the ground.  See Figure 2 above.

Once you have placed your index finger atop the sensor and the Heart icon is flashing, do not move or reposition your finger since this will cause the sensor to start again and will likely cause an inaccurate calculation.

Remark:
1. The heart symbol flashes when signal is received.
2. Entering the Pulse Rate Monitor mode in Normal Time mode will enable you to use Pulse Rate measurement together with normal timing. Pulse Rate is displayed in the upper row and normal time is displayed in the lower row.
3. Entering the Pulse Rate Monitor mode in Chronograph mode will enable you to use Pulse Rate measurement together with the chronograph. Pulse Rate is displayed in the upper row and chronograph is displayed in the Lower row.

5

4. Entering the Pulse Rate Monitor mode in Timer mode will enable you to use Pulse Rate measurement together with the count down timers. Pulse Rate is displayed in the upper row and count down time is displayed in the lower row.
5. An arrow pointing up or down will be displayed next to the Pulse Rate reading to indicate that the current heart rate is above the upper limit or below the lower limit of the safety range respectively. And warning sound will also be given if "Sd" is in "on" state.
6. To exit Pulse Rate Monitor mode, press button S2 or if no signal is received for 2-3 minutes, the watch will exit automatically.

## (J) HOW TO RESET THE WATCH
In any mode, press & hold all buttons at the same time for 2-3 seconds, the display will be turned off, release the buttons and the display will be turned on again, with the watch reset to AM 12:00 00 Sun 1st Jan.
The daily alarm and hourly chime is reset to "off" state.

## (K) BATTERY REPLACEMENT
Replace the exhausted battery with a CR2032 cell or equivalent.

<div align="center">

**LIMITED WARRANTY**
**OUR BASIC POLICY**

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Marshall –Browning International Corporation (MBI Corp.) warrants to the original owner, this timepiece (excluding battery, less, 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 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 $7.50 to cover the cost of shipping and handling
**WHAT IS NOT COVERED BY THE WARRANTY**
A. MBI Corp. will not repair defects of 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 viable 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 your ($7.50) 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.
<div align="center">

**YOUR RIGHTS UNDER IMPLIED WARRANTIES AND STATE LAW.**

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MBI Corp. limits the duration of any warrant implied by state law, including the implied warrant 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 my 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 timepiece 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 **CR2032 (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:
<div align="center">

MBI CORP, 115 HURLEY RD, OXFORD, CT 06478

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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 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…Timers & pedometers for champions at every level! Please call (203) 264-2702 for a free catalog.