

# CITIZEN®

## Setting Instructions for Movement Caliber A510

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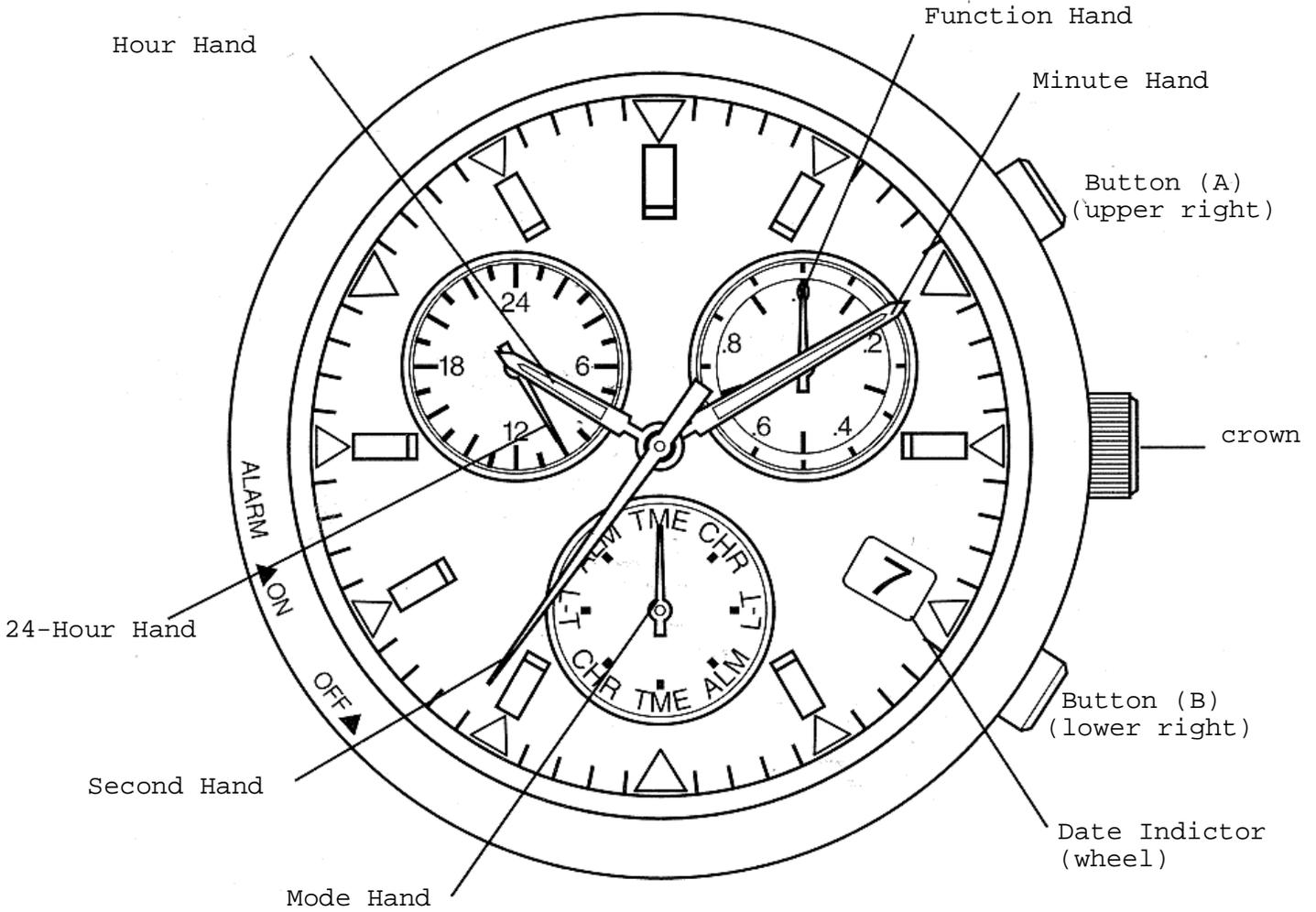
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# 1. Features

This watch is an analog quartz watch equipped with multiple functions including and auto calendar function that changes the date automatically, a daily alarm function that can be set based on a 24-hour clock, and a chronograph function that allows measurement of time in 1/2-0 second increments up to 59.95 minutes/seconds.





## 2. Names of Components

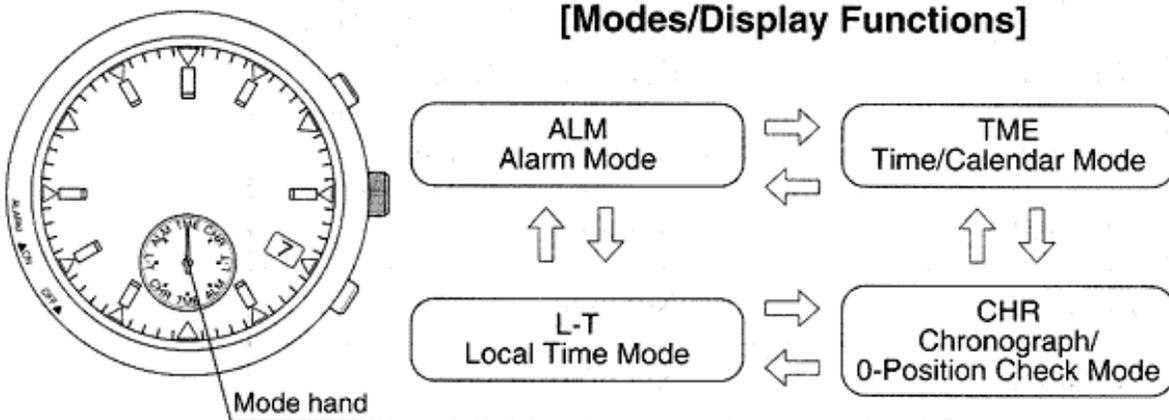
Name/Mode		Time/Calendar	Chronograph	Local Time	Alarm
Mode Hand		TME	CHR	L-T	ALM
Function Hand		Stops at 0-Position	Chronograph minutes, 1/20 <sup>th</sup> seconds	Stops at 0-Position	Stops at 0-Position
Date		Displays Date	Date Display (TME or L-T)	Displays date of local time	Date Display (TME or L-T)
Hour Hand		Displays Hours	Displays Hours (TME,L-T or ALM)	Displays hours of local time	Displays alarm hours
Minute Hand		Displays Minutes	Displays Minutes (TME,L-T or ALM)	Displays minutes of Local Time	Displays Alarm Minutes
Second Hand		Displays Seconds	Chronograph Seconds	Displays Seconds	Displays ON/OFF
24 Hour Hand		24-Hour time display in coordination with hour hand	24-Hour time display in coordination with hour hand	24-Hour time display in coordination with hour hand	24-Hour time display in coordination with hour hand
Crown	Normal Position	Mode Switching	Mode Switching	Mode Switching	Mode Switching
	Position 1	Calendar Correction	0-position check/correction (function hand, date wheel)	Local Time Display	Alarm ON/OFF setting
	Position 2	Time Correction	0 position check, correction (second hand, 24-hour hand, hour hand, minute hand)	Local Time Correction	Alarm time correction (including ON/OFF switching)
Button A (Upper Right)	Crown Normal Position	Not Used	Function hand and date wheel 0-position	Not Used	Alarm Time monitor (pressing continuously for at least 2 seconds)
	Crown Position 1	Not Used		Not Used	ON/OFF Switching
	Crown Position 2	Not Used		Not Used	ON/OFF Switching
Button B (Lower Right)	Crown Normal Position	Not Used	Recalls 1/20 <sup>th</sup> seconds when stopped	Not Used	Not Used
	Crown Position 1	Month Correction	Not Used	Not Used	Not Used
	Crown Position 2	Not Used	Not Used	Not Used	Not Used





### 3. Switching the Mode (Display Function)

This watch is equipped with four modes consisting of time/calendar, chronograph, local time and alarm. Since the mode changes when the crown is turned, the current mode can be confirmed with the mode hand.



### 4. Hand 0-Position Check

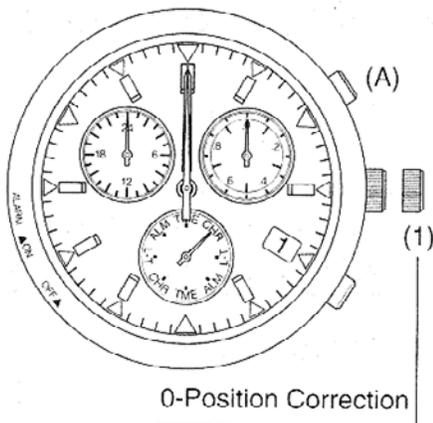
Before using this watch, check that the functions of the watch operating properly by performing the following procedure:

**0-Position:** This refers to the base position of each hand that enables the watch to function properly.

#### 0-Position Check

1. Turn the crown to switch the watch to the chronograph (CHR) mode
2. Pull the crown to position 1 to check the 0-position (function hand and date wheel correction mode). Confirm that the 24-hour, hour, minute, second and function hands rapidly advance to the 0 position and the date wheel displays 1.

#### 0-Positions of each hand (base position)



- 24 hour hand: 24:00
  - Hour and Minute Hands: 0:00
  - Second Hand 0:00 seconds
  - Function hand '0' position (12:00 position)
  - Date Wheel 1<sup>st</sup>
- Perform the "0-position correction" when the hands and date wheel are not at the positions indicated above.





## [0-Position Correction]

### **O-Position Correction of Function Hand and Date Wheel**

1. Pull the crown out to Position 1 in the chronograph [CHR] mode to correct the function hand and date wheel.
2. Click (turn) the crown to the left to align the date wheel.
  - a. Clicking the crown once causes the function hand to make four revolutions and the date to be corrected by one day.
  - b. Turning the crown rapidly (clicking continuously two or more times) causes the function hand to advance continuously. When stopping the function hand, click the crown to the right or left. When the function hand is not stopped manually, it stops automatically after advancing 31 days,

The 12:00 position immediately after the date changes to the "1st" is the 0-position of the function hand. After correcting the date wheel to the "31st" by turning the crown, press button (A)(upper right) to finely correct the function hand so that the function hand is aligned at the 0-position after the date wheel changes to the 1<sup>st</sup>.

### **O-Position Correction of 24-hour Hour, Hour, Minute and Second Hands**

1. Pull the crown out to Position 2 in chronograph [CHR] mode to correct each hand.
2. Pressing button (A)(upper right) causes the second hand to be corrected by one second at a time, each time it is pressed. Continuously pressing button (A)(upper right) causes the second hand to advance rapidly.
3. Clicking the crown allows correction of the 24-hour, hour and minute hands.
  - a. Clicking the crown once to the left causes the hour and minute hands to move clockwise.
  - b. Clicking the crown once to the right causes the hour and minute hands to move counter-clockwise.

Turning the crown rapidly (clicking continuously two or more times) causes the hands to advance rapidly. When stopping the hands, click the crown once to the right or left. When the hands are not stopped manually, they stop automatically after being corrected by 12 hours.

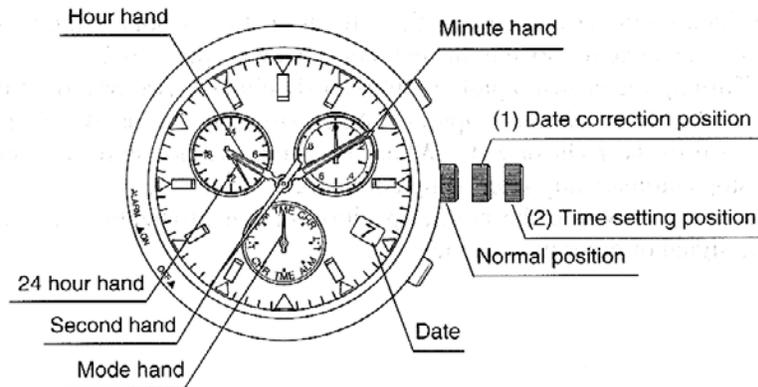




## 5. SETTING THE TIME

### Setting the time

1. Turn the crown and align the mode hand at the time/calendar(TME) mode.



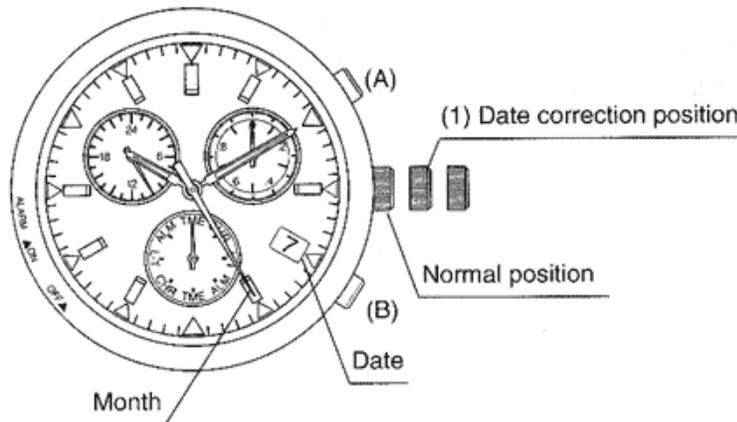
2. When the crown is pulled out to position 2(time setting position), the second hand rapidly advances to the 6 seconds position and stops.
  - a. Note: When the second hand does not stop at the 0 seconds position, reset the base position in the "0-Position Correction Mode".
3. Click (1 turn) the crown to set the time.
  - a. Clicking the crown once to the right causes the 24-hour hand, hour hand and minute hand to move in the clockwise direction.
  - b. Clicking the crown once to the left causes the 24 hour hand, hour hand and minute hand to move in the counter-clockwise direction.

Turning the crown rapidly (continuously clicking two or more times) causes the hands to advance rapidly. When stopping the hands, click the crown once to the right or left. When the hands are not stopped manually, they stop automatically after being corrected by 12 hours.

4. Return the crown to the normal position in synchronization with a telephone time signal or other time service.

### Setting the Date

As a result of being equipped with an auto-calendar function, it is not necessary to correct the date at the end of each month. However, since the watch uses 28 days for the month of February, it is necessary to correct the date at the end of February in a leap year.



1. Turn the crown to switch the watch to the time/calendar[TME],mode.



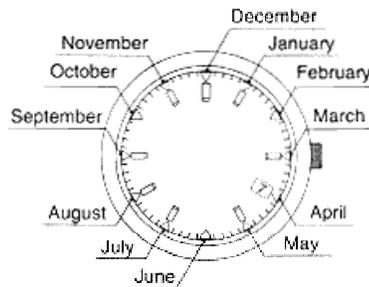


- When, the crown is pulled out to position 1 (date correction position), the second hand rapidly advances to the month display position stored in memory, and stops.
- Click (turn) the crown to the left to set the date. Clicking the crown once to the left causes the function hand to make four revolutions and the date to be corrected by one day.

Turning the crown rapidly (continuously clicking two or more times) causes the hand to advance continuously. When stopping the hand, click the crown once to the right or left. When the hand is not stopped manually, it stops automatically after being advanced 31 days.

- Pressing button (B)(lower right) allows correction of the month. Press button (B)(lower right) and align the second hand at the position corresponding to the month

**\* Interpretation of Month/  
Position of Second Hand\***  
January: 1:00 position  
February: 2:00 position  
March: 3:00 position  
:  
December: 12:00 position



- Return the crown to the normal position after setting the date. The watch will resume keeping time once the second hand catches up to the current seconds.

**<When the Calendar has been Set to a Non-existent Date>**

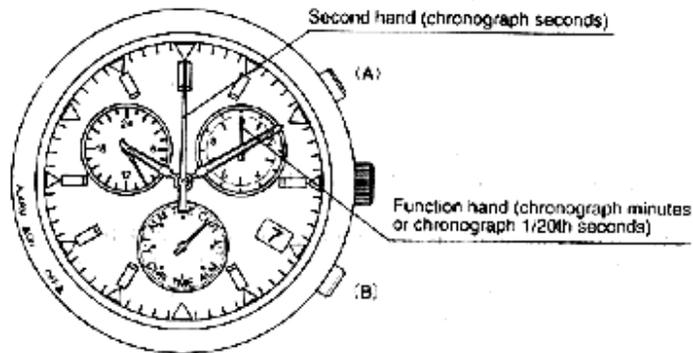
When the watch is set to a date that does not exist (February 30, for example), the watch automatically switches to the 1st day of the following month when the crown is returned to the normal position.





## 6. USING THE CHRONOGRAPH

The chronograph is able to measure time up to a maximum of 59 minutes 59.95 seconds in  $1/20^{\text{th}}$  second units, after which it resets to 0.



### [Explanation of Hands During Chronograph Measurement]

When the crown is turned and the mode hand is set to the chronograph [CHR] mode, the second hand and function hand are rapidly advanced to the '0' position and the watch enters the chronograph mode.

Second hand:

Switches to the chronograph second hand. The second hand advances rapidly and makes one revolution only when starting at 0 seconds, after which it moves in 1-second increments to measure chronograph seconds.

Function hand:

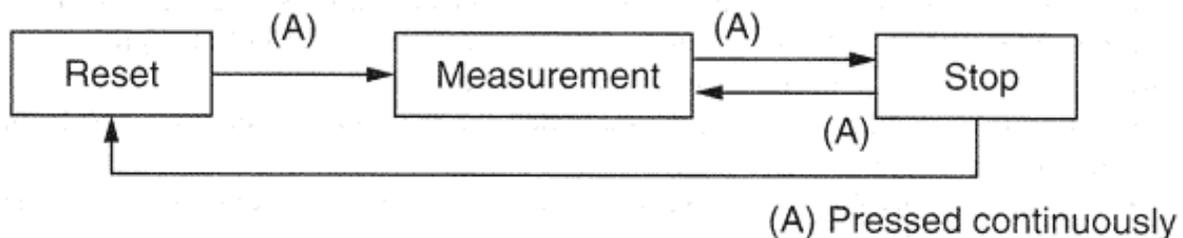
Switches to either chronograph minutes or chronograph  $1/20^{\text{th}}$  seconds. The function hand moves in one-minute increments to measure chronograph minutes. When button (B) (lower right) is pressed when the chronograph is stopped, the function hand switches to  $1/20^{\text{th}}$  second display during time button (B) (lower right) is pressed.

Note: 24 hour, hour, and minute hands, date wheel:

- Continues to display the current time when the watch has been switched from the time/calendar mode.
- Continues to display local time when the watch has been switched from the local time mode.
- Continues to display the alarm set time when the watch has been switched from the alarm mode.

### Chronograph Measurement

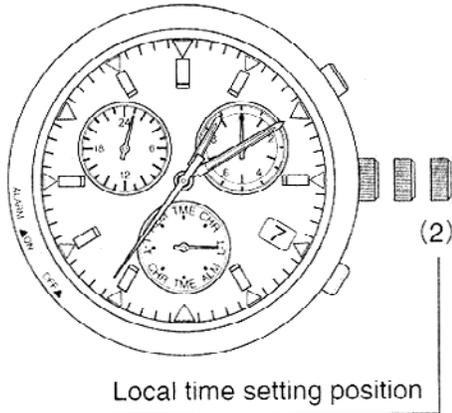
1. Turn the crown to set the mode hand to the chronograph [CHR] mode.
2. Press button (A) (upper right) to start and stop the chronograph. A confirmation tone is heard whenever button (A) is pressed.
3. Continuously pressing button (A) (upper right) when the chronograph is stopped causes the chronograph second hand and chronograph minute hand to be reset to the 0 position.





## 7. SETTING THE LOCAL TIME

The local time function allows the time in a different time zone to be set separately from the current time. Local time is set by performing a time difference correction in 1-hour units, based on the current time, (time of the time mode/TME). The minute and second hands move in coordination with the current time.



1. Turn the crown to set the mode hand to the local time [LT-1] mode.
2. Pull the crown out to position 2 (two clicks)(local time setting position)
3. Click the crown to the right or left to correct the time difference.

When the crown is clicked to the right, the hour hand moves by 1-hour in the clockwise direction.

When the crown is clicked to the left, the hour hand moves by 1-hour in the counter-clockwise direction.

**Note:** the hour hand is not advanced rapidly even if the crown is continuously clicked two or more times. Perform correction accurately at 1 hour at a time. Furthermore the range of time difference correction is +/- 23 hours based on the current time.

4. Always make sure to return the crown to the normal position after correcting the time difference.

**Note:**

If the hour hand passes 12:00 AM(midnight) during correction the date is advance by 1 day following completion of the hand movement. If the time difference is corrected counter-clockwise direction and the hour hand passes over 12:00 AM(midnight), although the date is corrected following the completion of hand movement, since the date is corrected by 30 days in the clockwise direction, it takes from 2-3 minutes for the date to be corrected. Pay special attention to the AP and PM when correcting the time difference

**NOTE:**

When returning the time difference to the original setting, return the hour hand in the direction opposite that when the time difference was corrected.

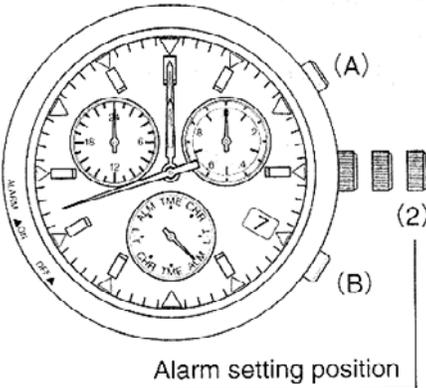




## 8. USING THE ALARM

The alarm function uses a 24-hour clock. Once the alarm has been set, the alarm sounds for 15 seconds when the set time is reached once a day. The time at which the alarm sounds applies to the time (TME) mode and cannot be set based on the local time (L-T) mode.

### Setting the Alarm



1. Turn the crown and set the mode hand to the alarm (ALM) position.
  - a. Second Hand: Moves rapidly to the ON or OFF position
  - b. 24-hour, hour, and minute hands: Move to the previously set alarm time.
  - c. Function Hand: Stops at the 0-position
2. Pull out the crown to position 2 (2 clicks out) (alarm setting position)
  - a. The alarm setting is turned on automatically.
3. Click (turn) the crown to set the alarm time
  - a. Clicking once to the right causes the hour and minute hands to move clockwise.
  - b. Clicking once to the left causes the hour and minute hands to move counter-clockwise. Turning the crown rapidly (continuously clicking two or more times) causes the hands to advance rapidly. When stopping the hands, click the crown once to the right or left. When the hands are not stopped manually, they stop automatically after being corrected by 12 hours. Set the alarm while making sure not to mistake AM or PM by referring to the 24-hour hand.
4. Return the crown to the normal position after setting the alarm

### Switching the alarm ON and OFF

The alarm is switched ON and OFF each time button (A)(upper right) is pressed when the crown is pulled out to Position 1 or 2 (1 or 2 clicks out) in the alarm mode.

### Alarm Tone Monitor

When button (A)(upper right) is pressed with the crown in the normal position in the alarm mode, the alarm sounds for as long as button (A)(upper right) is pressed.

### Stopping the Alarm Tone

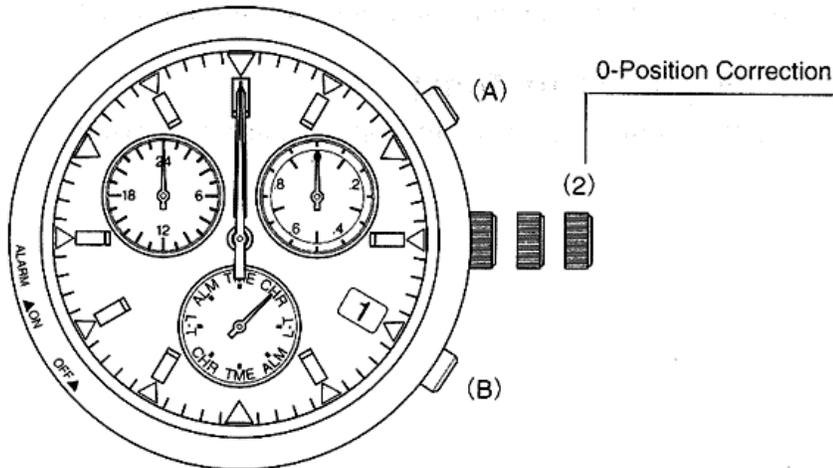
Press either button (A)(upper right) or (B)(lower right) to stop the alarm tone when it is sounding.





## 9. ALL RESET

This watch may not function properly as a result of being subjected to the effects of static electricity, a strong impact, etc. When this happens, set the hands of the watch to their respective base positions according to the following procedure after performing the ALL-RESET procedure.



1. Turn the crown to set the mode hand to the Chronograph (CHR) position
2. Pull out the crown to Position 2 (2-clicks out) (0-position correction mode) Each of the hands and date wheel move to their respective 0 positions stored in memory and then stop
3. Press buttons (A)(upper right) and (B)(lower right) simultaneously and then release.  
Following a confirmation tone, each of the hands perform a demonstration movement in the order of the function hand, 24-hour hand, hour hand, minute hand and second hand to indicate the all reset procedure is finished.
4. Following the all reset procedure, be sure to properly reset each mode after performing 0-position correction for each hand before using watch.





## 10. SPECIFICATIONS

Movement Caliber Number	A510
Type	Analog Quartz Watch
Accuracy	+/- 20 seconds/ month At normal operating temp. (5°c -35°c) (41° f -95° f)
Operation Temperature Range	(-10°c -60°c) (14° f -140° f)
Display Functions	Time: 24 hours, hours, minutes seconds  Calendar: Date displayed by a date wheel (With continuous advance function.) Month by display of second hand
Additional Functions	<ul style="list-style-type: none"><li>• Chronograph (60 minute measurements, 1/20<sup>th</sup> second units)</li><li>• Local time (time difference correction in 1 hour increments)</li><li>• Alarm (24-hour clock, alarm monitor: 1 hour units)</li></ul>
Power Cell	Silver Oxide Battery (SR927W)
Life of Power Cell	Average life is approximately 2 years. Note, age of watch as well as, alarm and chronograph use affect the life of the battery.

\*note: specifications are subject to change without notice.



# PRECAUTIONS ABOUT CARE AND HANDLING OF WATCHES

## TEMPERATURE CARE

Avoid temperature extremes. Exposing your watch to high temperatures, such as placing it on the dashboard of a vehicle or use in a hot tub, may cause the watch to malfunction, shorten battery life or damage certain components. Leaving the watch in extreme cold temperatures may cause irregular timekeeping until the watch returns to normal operating temperature.

## SHOCK-RESISTANT

The watch may be worn while playing golf or other activities, but avoid severe shocks such as dropping it on a hard surface.

## MAGNETIC-RESISTANT

No problem should occur from using the watch around ordinary household electric appliances such as TV sets or stereos. Keep away from magnets.

## CHEMICAL/GAS RESISTANT

Do not expose the watch to chemicals or gases for long periods.

## WATCH CLEANING

Stains, waterspots and accumulated dirt on the case, crystal or band should be removed with a soft cloth to prevent damage and premature wear.

## HANDLING OF WATER-RESISTANT WATCHES

Although water-resistant watches are warranted, steps should be taken to avoid damage that may result from accidents or mishandling:

- Do not operate the crown or push-button in the water or while the watch is wet. Tighten screw lock crown completely.
- Should the watch become immersed in water, dry it off right away. If the watch comes in contact with salt water, be sure to rinse it thoroughly in warm fresh water to remove any trace of salt.
- If a watch is wet from cleaning or by accident, never store it in a closed container. It should be dried immediately or taken to a watchmaker or jeweler if moisture is inside the case to prevent damage from rust.
- Vital components necessary to resist the entrance of moisture deteriorate with time and use. Gaskets, crowns and other materials should be replaced every year or two to ensure

that water resistant quality remains at factory specifications.

## CARE FOR METAL BRACELETS

To extend the life and maintain the good appearance of the metal watch bracelet, the following recommendations are given:

- Be aware that since the watch and bracelet is worn next to the skin, it collects dust and perspiration and becomes soiled if not cleaned regularly. This is particularly true of the inner parts of the links or mesh of the bracelet.
- Soil and rust, when present in a bracelet, are dissolved by perspiration and can cause staining of cuffs and irritation of the skin in some instances.
- Heavy perspiration should be wiped off the watch and bracelet with a soft dry cloth. The bracelet should be cleaned occasionally by using an old toothbrush and warm soapy water after which the soap is thoroughly rinsed with clear water and the bracelet dried completely. The foregoing manner of cleaning should not be done if the watch is not water-resistant but should instead be done by your jeweler.

## CARE FOR STRAPS

### LEATHER

- Heavy perspiration, if not removed from a leather strap, can wash out the natural oils and cause the leather to become dry and deteriorate. Any moisture should be blotted with a soft dry cloth or paper towel and the strap allowed to dry naturally.
- Salt residue and soil can be removed from the leather by cleaning with a dampened soft cloth and mild soap or saddle soap.
- Occasionally, the inside surface of the strap should be cleaned by using a soft cloth dampened with alcohol.
- The strap should always be worn a little loosely (one finger space between wrist and strap) to allow air to circulate thus causing any moisture to evaporate.

### RUBBER

- Rubber straps should be washed frequently with mild soap and warm water using a soft brush.
- Thorough cleaning, using the same method, should especially be done after use in salt water.
- Solvents, oils, perspiration, tanning lotion and salt can cause rubber to deteriorate if not removed.

Marking on the Dial	Marking on the Caseback	 Face washing, splashes, sweat, raindrops, etc.	 Swimming	 Skin diving (diving without air tanks)	 Scuba diving (diving with air tanks)	Water-resistant characteristics
NONE	NONE	NO	NO	NO	NO	Non water-resistant watch and must be kept away from water.
NONE	WATER RESIST	OK	NO	NO	NO	An ordinary water-resistant watch and can withstand splashes, sweat, rain-drops and etc. for daily life use.
WR100M WR10bar WR150M	WATER RESIST	OK	OK	OK	NO	For frequent use with water. It is not specially designed for scuba diving.
WR200M	WATER RESIST	OK	OK	OK	OK	For skin and scuba diving. Usable up to the respective indicated depths.

See instruction book for further information





The water-resistant quality of our timepieces is offered in varying degrees depending on the model. This ranges from non-water resistant models to those suitable for SCUBA diving. Water resistance of our timepieces is measured in BAR or Barometric Pressure. Each BAR of pressure is equal to 14.5 pounds per square inch of pressure.

Water resistance is measured when the watch is at a static, or motionless state. As the watch is moved in water, such as from the motion of swimming, pressure is added from velocity. While you may be swimming in a pool at surface level, the watch may be experiencing forces equal to that of 100 feet of water pressure (3 BAR). Diving into a pool can cause forces on the watch to exceed those pressures. As such, you should always allow a margin of safety when exposing your watch to moisture. Never "push the limit" of the degree of water resistance of your timepiece.

A primary factor to keep in mind about water resistance is that periodic maintenance is needed to maintain original factory specifications for water resistance. When a watch is new, it meets specifications for water resistance as indicated on the case back. However, as the watch ages, the gaskets that seal the watch become dry and brittle, diminishing its water resistant quality. Exposure to environments such as chlorinated pools, salt water or soaps from showering can accelerate drying of the gaskets. We recommend that the gaskets be changed at least every 18 to 24 months to maintain the water resistant quality of your timepiece. If the watch is frequently exposed to chlorinated pools, soaps salt water, etc., we recommend that the gaskets be changed on a yearly basis.

From time to time, you may notice condensation that appears then goes away after a short period of time. This is a normal occurrence and happens primarily from sudden temperature changes. When there are sudden temperature changes such as entering a cool building from the hot out of doors, or jumping into pool on a hot day the watch may fog. Conversely, if you go to the cold outdoors from a warm building, fogging may occur. As long as the fogging clears in a short period of time, there is no need for concern.

Be sure the crown is completely pushed in prior to any contact with moisture. If your model is equipped with a screw down crown, be sure it is properly seated against the case. Do not operate the crown or any push button when the watch is wet as this may allow the entrance of moisture. . If at anytime, you notice moisture in your timepiece that does not clear in a short period of time, you should send your timepiece as soon as possible to the nearest Authorized Service Center for inspection.

You can determine the level of water resistance of our watches from the markings on your case-back. Additionally, models that are water resistant to 100 or 200 meters have an indication on the dial as well. The case-backs and dials are normally marked as follows:

**The case back has no indication of water resistance**

This indicates the watch is a non water-resistant model and is not designed for contact with moisture at all. Caution should be exercised to avoid any contact with moisture, such as when washing your hands or from a rainstorm.

**"Water Resist"**

This watch is designed to withstand water from accidental splashing, such as from washing your hands or rain. Any submersion into water may result in the entrance of moisture.

**"Water Resist 10BAR" or "W.R. 10BAR", Dial marked "WR100"**

This watch is designed to withstand water pressure up to 333 feet. This includes water exposure from accidental splashing and rain, but also from showering, swimming in a pool and snorkeling. Be sure to rinse the watch with fresh water after exposure to a chlorinated pool, salt water, soaps, etc. After rinsing with fresh water, be sure to dry the exterior with a soft cloth.

**"Water Resist 20BAR" or "W.R. 20BAR", Dial marked "WR200"**

This watch is designed to withstand water pressure up to 666 feet. This includes all exposure to water up to and including recreational SCUBA diving. Be sure to rinse the watch with fresh water after exposure to a chlorinated pool, salt water, soaps, etc. After rinsing with fresh water, be sure to dry the exterior with a soft cloth.

**Special Note about Jacuzzis and Hot Tubs**

The various components used in the manufacture and assembly of your watch expand at various rates. This results in a loss of the sealing capabilities of gaskets, which may allow moisture to enter. In addition, heat from these sources can cause deformation of certain materials leading to mechanical failures. For these reasons, you should remove your watch before entering a hot tub or Jacuzzi.

