

Introduction & Overview

Thank you for purchasing this QUARTZ WATCH.

To ensure correct use, please read these instructions carefully.

Please ensure that the Accurist International Guarantee Card is supplied with the watch on purchase, so that if necessary, you may claim service under the guarantee (subject to the terms of guarantee).

The analogue quartz watch is designed around the normal time, alarm, local time and calendar functions with a special audible repeater time feature.

THE REPEATER function lets you determine the current time by simple use of the watch's buttons.

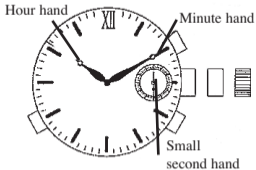
THE CALENDAR adjustment is a fully automatic Calendar.

ALARM FUNCTIONS

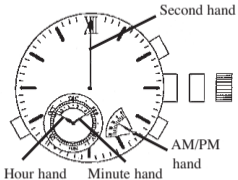
- ALARM I lets you set the desired alarm time quickly and easily. The alarm rings once at the set time and then automatically cancels the alarm setting after sounding for 10 seconds.
- ALARM II (DAILY ALARM) uses a different sound for morning, afternoon and night.
- LOCAL TIME ALARM (LOCAL AL) rings everyday at the set time
- THE LOCAL TIME settings can be made in 30-minute increments.

Using the watch

MAIN WATCH



SUB WATCH



Set the Main watch and Sub watch to the current time
(See “D. Setting the time page 10”)

Time signal chime (Repeater) is activated based on the Sub watch. This feature will not function properly if the Sub watch is not set.

If there is a one minute time difference (plus or minus) between the time signal chime and the main watch time setting, reset the Sub Watch to the same time as the Main Watch.

(Example) If the time signal chime is one minute slow, set the SUB WATCH forward one minute.

Wearing the watchband

If the watch is worn too tightly it may be difficult to clearly hear the Watch sounds. Allow a space of one finger between the watch and your wrist for best results.

Main Components & Functions

Date hand • Alarm ON/OFF hand
• Sub watch second hand

Day hand
Mode hand

Main watch
Hour hand

(C) Button
Day set
Mode switch

• Sub watch hour hand
• Local time hour hand
• Alarm hour hand
• Year hand

NOTE: This watch displays number of years from the leap year.

• Sub watch minute hand
• Local time minute hand
• Alarm minute hand
• Month hand

Main watch minute hand

• Time signal chime(Repeater)
• Date set
• Alarm ON/OFF

(A) Button

Normal position

2nd step position

Crown

(B) Button

• Set
• Year/month display mode

1st step position
Calendar adjust

Main watch small second hand

AM/PM hand

NOTE: The AM/PM hand should only be used to distinguish morning/evening. It should not be used as a 24 hour time display.



Hand Function

Crown	Mode	MAIN WATCH hour, minute, second	SUB WATCH hour, minute	AM/PM hand	Date hand	Mode hand
Normal Position	Normal	Main watch hour, minute, second	Local time, hour, minute	Local AM/PM	Date	Day
	Calendar	Main watch hour, minute, second	(Main watch) year, month	-	Date	Day
	Alarm 1	Main watch hour, minute, second	Alarm hour minute	Alarm AM/PM	ON	ALARM I
		Main watch hour, minute, second	(Main watch) hour, minute	(Watch) AM/PM	OFF	ALARM I
	Alarm 2	Main watch hour, minute, second	Alarm hour, minute	Alarm AM/PM	ON/OFF	ALARM II
	Local time	Main watch hour, minute, second	Local time hour, minute	Local time AM/PM	at 12 o'clock	LOCAL TM
	Local Alarm	Main watch hour, minute, second	Local time alarm hour, minute	Alarm AM/PM	ON/OFF	LOCALAL
	Second setting	Main watch hour, minute, second	(Sub watch) hour minute	(Sub watch) AM/PM	(Sub watch) second	SEC 0
First Step	Calendar setting	Main watch hour, minute, second	Year month	-	-	Day
Second Step	Time setting	Main watch hour, minute, second	(Sub watch) hour minute	(Sub watch) AM/PM	(Sub watch) second	SEC 0

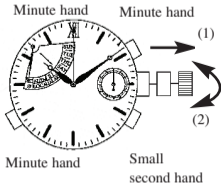
Button Functions

Crown	Mode	(A) Button	(B) Button	(C) Button	CROWN ROTATION
Normal Position	Normal Display	* Time signal chime (repeater)	*Calendar display	Mode switch *watch hand initial position monitor	-
	Calendar Display	To normal display	To normal display	To normal display	-
	Alarm I setting	* Sound monitor (OFF) Cancelling the alarm (ON)	Alarm setting	Mode switch *watch hand initial position monitor	-
	AlarmII setting	ON/OFF Switch *Sound monitor	Alarm setting	Mode switch *watch hand initial position monitor	-
	Local time setting	-	Local time setting	Mode switch *watch hand initial position monitor	-
	Local time alarm setting	ON/OFF Switch * Sound monitor	Local time alarm setting	Mode switch *watch hand initial position monitor	-
	Seconds setting	Seconds setting	-	Mode switch *watch hand initial position monitor	-
First Step	Calendar setting	Date setting	Leap year month setting	Day setting	-
Second Step	Time setting	Sub watch seconds setting	Sub watch hour, minutes setting	-	Main watch hour, minute setting

Setting the time

When setting the current time it is essential to set both the Main watch and Sub watch to the same time. If the Sub watch is not matched to the Main watch, the Repeater will not sound properly.

MAIN WATCH



(1) Pull the crown out to the 2nd step position when the small second hand is at 0 position (12 o'clock) and stops.

*When the crown is pulled out the 2nd step, the mode hand points to "SEC 0". At the same time, the date hand changes to the Sub watch second hand and moves to the 0 (12 o'clock) position and stops.

(2) Turn the crown to set the Main watch to the current time.

(3) Press the (B) button to set the Sub watch to the current time.

*The time setting advances one minute each time the (B) button is pressed. Press and hold down the (B) button to quick-advance the hour, minute hand.

NOTE:

The Sub watch hour, minute hands are synchronized with the AM/PM hand. Watch the AM/PM hand when adjusting the Sub watch time setting to ensure the proper setting is made.

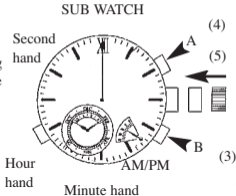
(4) When the Sub watch second hand is not aligned with the “0 sec” position, press (A) button to set it to this position.

Press the (A) button to advance the second hand in 1-second increments.

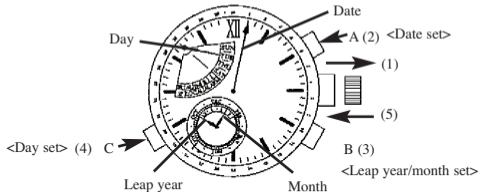
Press and hold down the (A) button to quick-advance the second hand.

(5) Push the crown into the normal position at the desired time to start the watch running at the correct time. At this time the Sub watch second hand returns to its normal function as the date hand.

The mode hand switches to indicate the day, the hour and minute hands of the Sub watch switch to local time.



Setting the Calendar



(1) Pull the crown out to the 1st step position. At this time, the local time hour, minute hand switches to the leap year, month hands.

*The calendar hands advance one increment each time the (A) or (B) button is pressed.

Press and hold down the (A) or (B) button to quick-advance the calendar hand.

(2) Date Set

- Press the (A) button to set the date

(3) Leap year/month set

- Check the number of years following the leap year for the current year. (See below).
- Press the (B) button to set the leap year and month. The year hand is synchronized with the month hand.

*Reading the leap year display

The leap year and years following the leap year are displayed as shown in the diagram. When the year hand is in the position 3, the reading is “the third year following the leap year”.



*Leap year display

1991	Year 3	1995	Year 3	1999	Year 3
1992	Leap Year	1996	Leap Year	2000	Leap Year
1993	Year 1	1997	Year 1	2001	Year 1
1994	Year 2	1998	Year 2	2002	Year 2

(4) Day Set

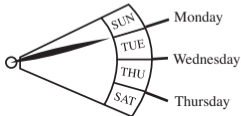
- Press the (C) button to set the day.
- Pressing the (C) button advances the hand one day at a time.

Quick-advance is not a feature of this function.

*Reading the day display

The lines between the days listed on the day display represent the days not listed.

Therefore, the line between 'Sun' and 'Tue' represents 'Monday' etc.



(5) Push the crown all the way in to the normal position when adjustments are complete. *The calendar will not function properly when the crown is left in the 1st step position.

Adjustment-free calendar

This feature lets you use your watch without need to make end-of-month or leap year adjustments.

Example:

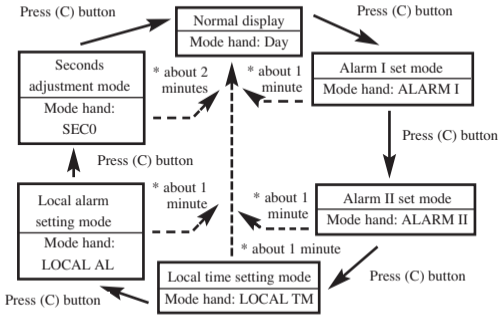
End-of-month: 11/30 → 12/1 Automatic adjustment

Leap year: 2/29 (Leap year) → 3/1 Automatic adjustment

2/28 → 3/1 Automatic adjustment

*The day setting does not change under this feature.

Switching Modes



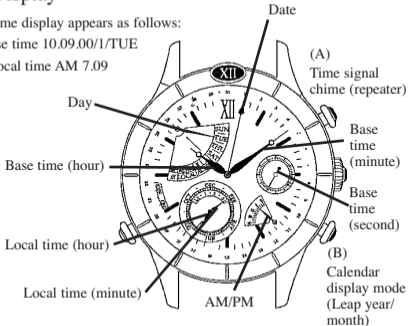
* If there is no input the watch automatically returns to the normal display.

Normal Display

The normal time display appears as follows:

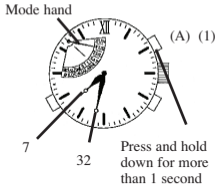
Example: Base time 10.09.00/1/TUE

Local time AM 7.09



- Press the (A) button to sound the time signal chime (see page 18)
- Press the (B) button to display the calendar (see page 20)

A. Time signal chime (repeater)



The feature allows you to tell the current time by the watch's chime sound:

*This feature will not work unless the mode hand is set to day (normal) display.

(1) Press and hold down the (A) button for more than 1 second to activate the chime sound. Time signal chime (Repeater) operates under the 12-hour system.

(Example) You want to make the watch chime sound at 7.32.

- 1) Hour sound: One high-pitched chime sounds each second for each hour (7 times = 7 o'clock)
- 2) Quarter sound: One high and one low-pitched chime sounds each second ($1/4\text{hr} \times 2 = 30$ minutes)
- 3) Minute sound: One low-pitched chime sounds each second (2 times = 2 minutes)

By playing the above sound you know the time is now 7.32.

*Press any button while the chime is playing to stop the sound.

NOTE:

The Chime sound cannot be activated while the calendar is being displayed.

The time is not set properly if the time display and chime sound are not synchronized.

See “D” SETTING THE TIME” (page 10)

B. Calendar Display

The calendar feature displays the date and day of the week.

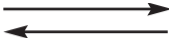
It is also possible to display the month and leap year calendar indications by using the watch's (B) button

NORMAL DISPLAY

<Tuesday, January 1>



Press and hold down the (B) button for more than 2 seconds



Press any button to manually return to the normal display

CALENDAR DISPLAY

<Tuesday, January 1, leap year>



Crown in the normal position

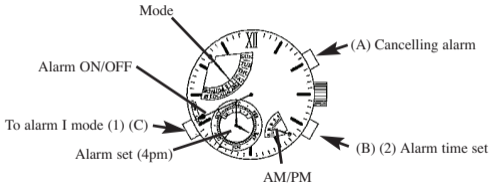
Press and hold down the (B) button for more than 2 seconds to switch the Local time hour, minute hands to the Leap year, month hands.

Alarm I

Alarm I...Lets you set the desired alarm time quickly and easily. The alarm rings once at the set time and then cancels the alarm setting.

Setting Alarm I

- The alarm can be set in one-minute increments.
- AM/PM can be determined with the AM/PM hand.
- Alarm hour, minute hands and AM/PM hand are synchronized.
- Press the (B) button once to advance the alarm hands one minute at a time.
- Press and hold down the (B) button to use the quick-advance feature.



- Crown in the normal position

(Example) You want to set the alarm for 4pm today.

- (1) Press the (C) button to move the mode hand to the Alarm I position. At this time, the hour and minute hands of local time switch to the hour and minute hands showing current time.
- (2) Press the (B) button and set the alarm to 4pm. Always confirm the AM/PM hand to ensure the proper setting is made.

* When pressed the (B) button the alarm ON/OFF hand indicates the ON state.

NOTE:

When the alarm is set between 12-12.30AM, the alarm hands sweep forward and back in a 30 minute arc and stops at the set time. This is normal and does not indicate a faulty movement.

(3) Press the (C) button 5 times when the setting has been completed the mode hand returns to the day display (normal display).

[ABOUT THE ALARM I]

Alarm I rings for 10 seconds upon reaching the alarm set time. Press any button to stop the alarm once it has started chiming.

*** Cancelling the alarm setting**

Press the (A) button in the Alarm I mode to switch the alarm off.

* At this time, the alarm set time returns to the current time display.

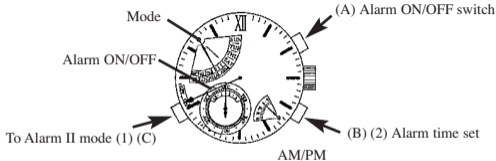
* If there is no input for about 1 minute the watch automatically returns from Alarm mode I to the normal display.

Alarm II

Alarm II (Daily Alarm)... This feature allows the alarm to ring everyday at the set time.

Setting the Daily alarm (Alarm II)

- The alarm can be set in one-minute increments.
- AM/PM can be determined with the AM/PM hand.
- Alarm hour, minute hands and AM/PM hand are synchronized.
- Press the (B) button once to advance the hands one minute at a time.
- Press and hold down the (B) button to use the quick-advance feature.



- **Crown in the normal position**

(Example) You want to set the alarm for 6.00am everyday.

(1) Press the (C) button to move the mode hand to the Alarm II position.

At this time, the Local time hands switch to the alarm hour, minute set hands and the date hands switches to the Alarm ON/OFF function.

(2) Press the (B) button and set the alarm to 6am. Always confirm the AM/PM hand to ensure the proper setting is made.

- Pressing the (B) button automatically moves the alarm ON/OFF hand to the ON position.

NOTE:

When the alarm is set between 12-12.30am the alarm hands sweep forward and back in a 30 minute arc and stops at the set time. This is normal and does not indicate a faulty movement.

(3) Press the (C) button 4 times when the setting is complete to move the mode hand back to the normal time display.

[ABOUT THE DAILY ALARM (ALARM II)]

Depending on the time of day for which the alarm is set, the watch will sound 3 different alarms.

- Refreshing Sound.....From 04.00am to 11.59am (14-second chime)
- Vibrant sound.....From 12.00noon to 5.59pm (15-second chime)
- Relaxing sound.....From 6.00pm to 3.59am (16-second chime)

Press any button to stop the alarm from chiming.

***Cancelling the alarm setting**

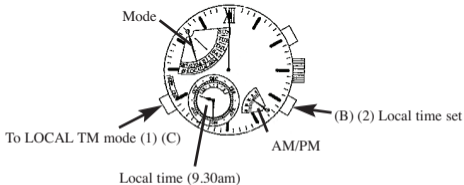
Press the (A) button in the Alarm II mode to switch the alarm off.

*If there is no input for about 1 minute the watch automatically returns from Alarm mode II to the normal display.

Local Time (LOCAL TM)

Setting Local Time

- Settings can be made in 30-minute increments.
- Local time hour, minute hands and AM/PM hand are synchronized.
- Press the (B) button once to advance in 30-minute increments.
- Press and hold down the (B) button to use quick-advance feature.



- **Crown in the normal position**

(Example) You want to synchronize the current time in Tokyo (5.30pm) with the local (current) time in Paris (9.30am)

- (1) Press the (C) button to move the mode hand to the LOCAL TM position. At the same time, the date hand moves to the 12pm (31st) position.
- (2) Press the (B) button to set the local time to 9.30am. Always confirm the AM/PM hand to ensure the proper setting is made.

NOTE:

When the local time is set between 12-12.30am the local time hands sweep forward and back in a 30 minute arc and stop at the set time. This is normal and does not indicate a faulty movement.

- (3) Press the (C) button 3 times when the setting is complete to move the mode hand back to the Day (normal) mode position.

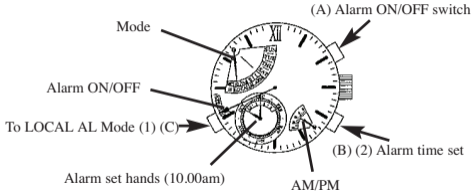
*If there is no input for about 1 minute the watch automatically returns to the normal display.

Local Time Alarm (LOCAL AL)

Local time alarm (Local AL)..... This feature allows the alarm to ring everyday at the set time.

Setting the Local time alarm

- The alarm can be set in one-minute increments.
- AM/PM can be determined with the AM/PM hand.
- Alarm hour, minute hands and AM/PM hand are synchronized.
- Press the (B) button once to advance the hands in one-minute increments.
- Press and hold down the (B) button to use the quick-advance feature.



- **Crown in the normal position**

(Example) you want to set the alarm to sound at 10.00am Paris time.

(1) Press the (C) button to move the mode hand to the LOCAL AL position. At the same time, the Local time hands switch to the alarm hour, minute set hands and the date hand switches to the Alarm ON/OFF hand.

(2) Press the (B) button to set the alarm to 10am. Always confirm the AM/PM hand to ensure the proper setting is made.

- Pressing the (B) button automatically moves the ON/OFF hand to the ON position.

NOTE:

When the alarm is set between 12-12.30am the alarm hands sweep forward and back in a 30 minute arc and stop at the set time. This is normal and does not indicate a faulty movement.

(3) Press the (C) button 2 times when the setting is complete to move the mode hand back to the day (normal) mode position.

[ABOUT THE LOCAL TIME ALARM]

The local time alarm will sound at the set time for 16 seconds.

*Press any button to stop the alarm from chiming.

*** Cancelling the alarm setting**

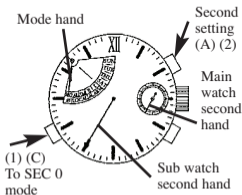
Press the (A) button in the local time alarm mode to switch the alarm off.

* If there is no input for about 1 minute the watch automatically returns from local time alarm mode to the normal display.

Seconds Setting

Refer to the 'Seconds adjustment' entry below for instructions on adjusting the watch within a range of 1/2 minute.

Seconds adjustment







• Crown in the normal position

Synchronizing the Main and Sub watch second hands.

- (1) Press the (C) button to move to the 'SEC 0' mode. The date hand switches to the Sub watch second hand function.
- (2) Press the (A) button once at the sound of a time signal to synchronize both second hands as shown in the diagram below.
- (3) Press the (C) button when the setting is complete to move the normal display. (The mode hand displays the day mode).

*If there is no input for about 2 minutes the watch automatically returns to the normal display.

	Second hand position	
	0 - 29 SEC	30 - 59 SEC
MAIN WATCH Second Hand	 <p>Second hand stops. Movement begins when Sub watch second hand reaches same position.</p>	 <p>Second hand advances to the 0 position and begins movement. The minute hand advances one minute</p>
SUB WATCH Second Hand	 <p>Second hand returns to the 0 position and begins movement</p>	 <p>Second hand advances to the 0 position and begins movement. The minute hand advances one minute.</p>

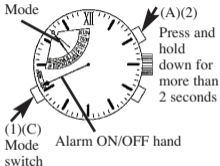
Sound Monitor

Sound monitor.... The sound monitor feature is used to confirm the alarm sounds in the Alarm I, Alarm II and Local time alarm modes.

- **Crown in the normal position**

- (1) Press the (C) button to move the mode hand to the alarm mode you want to monitor (Alarm I, Alarm II, Local time alarm).
- (2) Press the (A) button for more than 2 seconds to activate the sound monitor.

Sound Monitor



NOTE:

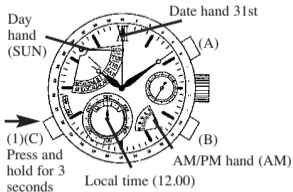
- Alarm I will only sound when the ON/OFF hand is in the OFF position.
- Alarm II: Whether the Local Time Alarm is set to ON or OFF, pressing button (A) for more than two seconds will activate the sound monitor. Caution should be exercised at this time because the Local Time Alarm switch setting will also be changed.

Initial Monitoring

Positioning of the watch's handsThis feature allows you to check and confirm the proper position for each of the watch's hands.

Checking the position of the watch's hands.

- **Crown in the normal position**



* This feature can be used with the mode hand in any position
(1) Press and hold down the (C) button for more than 3 seconds to move the hands to the following initial positions:

Date hand: 31

Day hand: SUN

Local time: 12.00

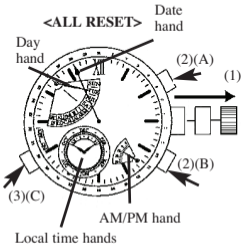
AM/PM hand: AM

- If the hands do not move to the above positions, see “INITIAL SETTING” page 36.
- If there is no input for about 20 seconds the watch will automatically return to the normal display.
- Press any button to manually return to the normal display.

Initial Setting

If the calendar, local time or various alarm functions of the watch do not operate correctly, follow the procedures listed below.

*These instructions should always be completed when new batteries are installed.



(1) Pull the crown out to the 2nd step position (mode hand display: SEC 0)

(2) Press and hold down all the buttons simultaneously for more than 2 seconds.

(3) Release all buttons to reset the watch's hands.

A confirmation beep will sound with the completion of this operation.

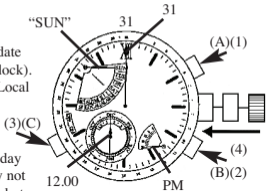
<Initial setting operations>

- Crown is in the 2nd position.

(1) Press the (A) button to set the date hand to the “31st” position (12 o'clock).
(2) Press the (B) button to set the Local time hand to the 12 o'clock position and AM/PM hand to the “PM” position.

(3) Press the (C) button to set the day hand to “SUN”. The day hand may not align precisely with the SUN mark but this does not adversely effect normal watch operations. Set the day hand to “SUN” even if the hand appears to be correctly positioned.

(4) Push the crown into the normal position to complete setting procedures. The AM/PM hand will automatically move to the “AM” position.



After setting the hands to the initial position, first refer to section D of the manual, “SETTING THE TIME” (page 9) to set the watch hands to the correct time. Then, refer to section E. “SETTING THE CALENDAR” (page 16), and set the calendar to the correct date.

Movement Check

Date hand quick-advance clockwise



- When the date hand quick-advances in a clockwise direction this indicates that the “time setting “ between the Main watch and Sub watch was not successfully completed.

- See “SETTING THE TIME” (page 10) for further instruction. (Time setting incomplete warning indication).

Date hand quick-advance counter-clockwise



- When the date hand quick-advances in a counter-clockwise direction this indicates that the “initial setting “ between the Main watch and Sub watch was not successfully completed.

- See “INITIAL SETTING” (page 36) for further instruction. (Initial setting incomplete warning indication).

Precautions

1. Resistance to water

- Check the following chart to determine the water resistant properties of this watch.

2. Avoid temperature extremes

- Avoid leaving your watch in direct sunlight or in extremely warm locations for long periods of time.

This will cause malfunctioning and shorten the life of the battery.

- Do not leave your watch for long periods of time in extremely cold places. This may cause your watch to gain or lose time.

- Place your watch on your wrist to restore its original accuracy should it begin to gain or lose time.

3. Avoid wet conditions

- Do not operate the buttons when your watch is wet.

4. Avoid strong shock

- This watch will withstand the bumps and jars normally incurred while playing and during sports activities.
- Avoid dropping your watch on the ground or otherwise imparting severe shock to it.

5. Avoid strong magnetic fields

- Keep your watch out of the immediate vicinity of strong magnets.
- Generally, your watch is not affected by magnetic fields from such household appliances as television sets and stereo equipment.

6. Avoid harmful chemicals, solvents and gases.

- Avoid wearing your watch in the presence of strong chemicals, solvents and gases. If your watch comes in contact with materials such as gasoline, benzene, paint thinner, alcohol, spray cosmetics, nail polish, nail polish remover, adhesives or paint, discolouration, deterioration or damage to the case, band and other components may occur.

Indication			Water-related use	
Water-resistant performance ranking	Watch face	Caseback	Light spray, perspiration, light rain, bathing etc...	Swimming etc...
A	-	-	NO	NO
B	-	WATER RESISTANT	OK	NO
C	Water resistant 50M (5 bar)	WATER RESISTANT	OK	OK
D	Water resistant 100M (10bar)	WATER RESISTANT	OK	OK
E	Water resistant 150M (15 bar)	WATER RESISTANT	OK	OK

Skin diving (without air tank)	Scuba diving (with air tank)	Water-resistant characteristics
NO	NO	Not water resistant, keep away from water
NO	NO	Water resistant, can withstand light spray, perspiration etc...
NO	NO	Suitable swimming, not diving
OK	OK	Suitable for skin diving
OK	OK	Suitable for scuba diving

NB Always set the crown in the normal position. Tighten screwlock crown.

7. Keep your watch clean

- It may become difficult to pull out the crown due to dirt and dust getting caught between the crown and the watch case when the watch is worn for long periods of time. To help prevent this from happening, turn the crown freely back and forth occasionally while it is in the normal set position.
- Wipe off any water and moisture that adheres to the case, glass and band with a soft, clean cloth. Any dirt left on the case or band may cause skin rashes. A watchband will easily become soiled with dust and perspiration because it is in direct contact with the skin. Even a stainless steel or gold-plated band may begin to corrode if it has not been cleaned for a long period of time.
- Mesh bands, because the meshes are very fine, will lose their particular “flexibility” if they are left soiled for a long time.
- Metal watchbands should be washed periodically to keep them looking beautiful at all times. Metal watchbands are usually washed with a brush in mild, soapy water and wiped thoroughly with a soft, absorbent cloth to make sure all water is removed. Pay attention to prevent any water from getting inside your watch when the band is washed.

8. Periodic Inspection

- Getting your watch checked once every year or two is recommended to ensure long use and trouble-free operation.

9. Be sure to keep the batteries out of reach of infants and small children. Should accidental ingestion occur, consult a doctor at once.

18. Specifications

1. Type: Multi-hand analogue quartz watch.
2. Quartz oscillation frequency: 32,768 hertz
3. Accuracy: + 20 seconds per month at normal temperatures 5 C to 35 C/ (41 F to 95 F)
4. Effective temperature range: -10 C to 60 C (14 F to 140 F)
5. Converters: Bipolar step motors (4 pcs)
6. Additional features
Hand display calendar
Day, date (normal display): Month, leap year display dependent on push button switching.
Leap year/end-of-month automatic adjustment.
Alarm I: Alarm rings once at set time (Setting is cancelled)
Alarm II: Alarm rings every day at set time (daily alarm)
Local time: Hour, minute, AM/PM indication, 30-minute increment settings
Local time alarm: Alarm rings every day at set (local) time. Alarm I, II, Local time alarm can all be set in one-minute increments.
Time Signal chime (Repeater): Two different sound chimes for hour, quarter hour, and minute signals are used to indicate the current time.
Sound monitor: Allows confirmation of all Alarm I, II, Local time alarm sound
Alarm Accuracy: Within + one minute of the set alarm time.
Other: Incomplete time settings warning indication.
Incomplete initial settings warning indication.
7. Battery: 1 Silveroxide cell Battery No.280-44 (SR927W)
8. Battery Life
About 2 years Alarm I (10 sec): once /2 days
About 2 years Alarm II (16 sec): once/day
Local time Alarm (15 sec): once/4 days
Time signal chime (17 sec): once/day
The life of the battery sec is dependent on the amount of alarm use.
9. IC:1 CMOS-LSI