

Features



The combination watch of the analog and digital display



World time alarm—sounds at the time of the selected city (→ page 26)

Eco-Drive

Solar-powered—no need for battery replacement (→ page 9)



Chronograph function—can display split time (→ page 30)



World time—easy to see the time and calendar of 30 cities all over the world (→ page 14)



Timer function—can be set for up to 99 minutes (→ page 32)

You can view explanations of the operation of this watch by accessing the Citizen web site and viewing the “Service & Support.”

URL: <http://www.citizenwatch.jp/>



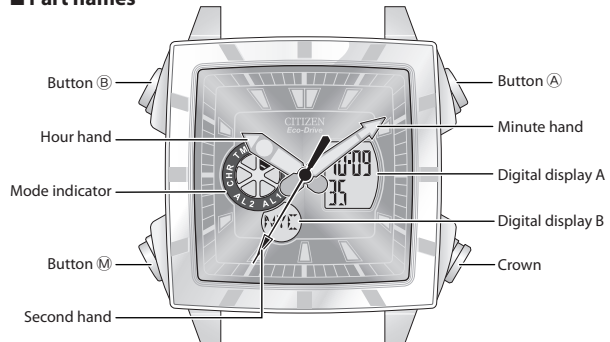
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Before use

Part names



The illustrations in this instruction manual may differ from the actual appearance of your watch.

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Checking the battery

Confirm the movement of the second hand to check the battery.

The second hand is moving at 1-second intervals.

The second hand is moving at 2-second intervals or has stopped.

Charge the battery. (→ page 6)

Adjust the time and calendar.

- Setting the time (→ page 18)
- Setting the calendar (→ page 24)

Start using the watch!

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Charging the battery

■ Charging the battery

This watch has a battery which is charged by exposing the dial to light such as direct sunlight or fluorescent lamps.

To obtain the best performance

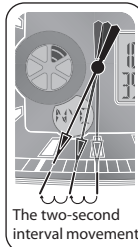
- **Expose the dial to direct sunlight for several hours at least once a month.**
- After taking off the watch, put it **where the dial is exposed to bright light**, such as by a window.
- Before storing the watch in a dark place for an extended period of time, fully charge the battery.

When the watch is covered with long sleeves, for example, the battery may not be charged sufficiently. Try to keep the watch exposed to light even when wearing the watch.

Do not charge the battery at a high temperature (about 50°C/122°F or higher).

■ When the battery becomes short of power—Insufficient charge warning function

When the battery becomes short of power, the second hand moves once every two seconds—insufficient charge warning function. Charge the battery by exposing the dial to light.



- After the battery is charged for a while, the second hand will move normally.
- If you have not charged the battery for four days or more since the warning movement began, the battery will run out and the watch will stop.

While the function is activated...

You cannot use any mode other than [TME]. (→ page 12)
 The settings of the other modes are initialized. (→ page 37)
 The mode automatically changes to [TME] as the function is activated.

Charging the battery

■ Charging time

Below are the approximate values for when exposing the dial to light continuously.

Use the table below only as a reference.

Illuminance (Lx)	Environment	Charging time to work for one day (approx.)	Charging time to start working normally when the battery is empty (approx.)	Time for charging fully when the battery is empty (approx.)
500	Interior lighting	4 hours	—	—
1,000	60-70 cm (24-28 in.) under a fluorescent lamp (30 W)	2 hours	—	—
3,000	20 cm (8 in.) under a fluorescent lamp (30 W)	45 minutes	7.5 hours	—
10,000	Under cloudy weather	12 minutes	2.5 hours	80 hours
100,000	Under direct sunlight in summer	3 minutes	50 minutes	16 hours

Battery duration after fully charging (without further charging)

About 8 months

<After the battery is fully charged—Overcharge prevention function>

After the battery is fully charged, charging automatically stops to prevent overcharging, which may damage the battery, or affect the accuracy, functions, and performance of the watch.

Eco-Drive

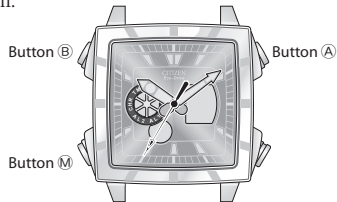
This watch has the “Eco-Drive” system, which converts light into electrical energy using the solar cell beneath the dial. The system makes you free from care of battery replacement and is environment-friendly as no battery disposal is required.

Power saving function

When the watch is not exposed to light for more than 30 minutes, all digital displays are automatically turned off to save the battery power. (Power saving function)

While the function is activated...

- All digital displays are turned off.
- All hands keep moving.

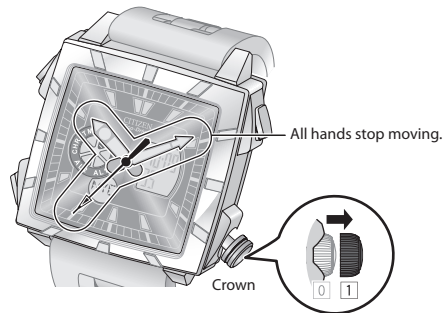


To cancel the function

Expose the dial to light or press any button.

<When leaving the watch unused for an extended period of time>

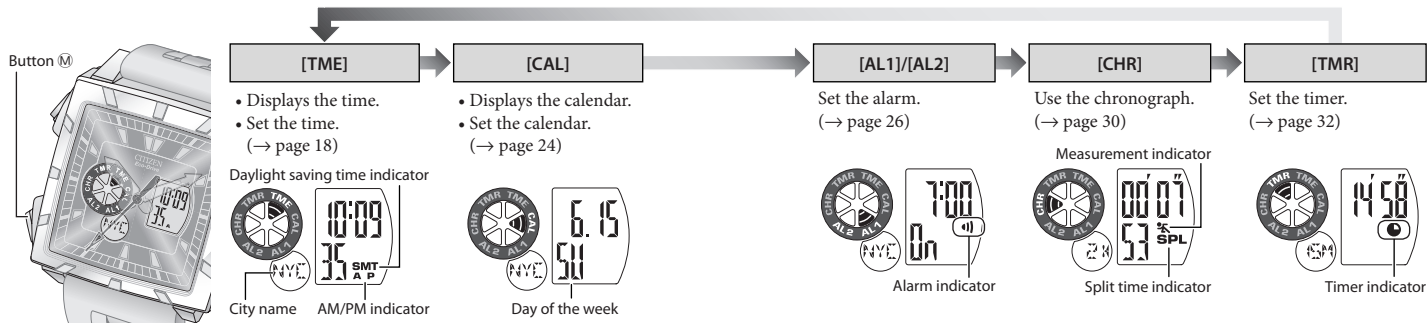
Pull out **the crown** to position . All hands stop moving and the battery power is saved further.



Changing the mode

The digital section of this watch has 6 modes.

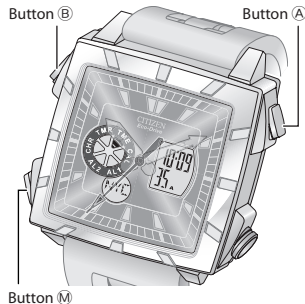
To change the mode, press **button**  repeatedly.



World time function

You can select one of 30 cities all over the world + UTC (Coordinated Universal Time)* and display its time/calendar.

■ Selecting the city



Select a city name as required when...

- setting the time/calendar
- checking the time/calendar
- setting the alarm

On the world time function

- After setting the time/calendar for one of the cities, those of the other cities are also set automatically.
- The world time function does not affect the analog section of this watch.

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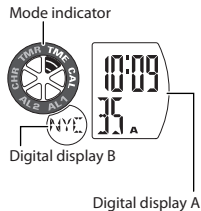


1. Press **button M** repeatedly to change the mode to [TME] or [CAL].

2. Press **button A** or **button B** repeatedly to select a city name on **digital display B**.

- Refer to “The table of city names” (→ page 16) for the selectable cities.

The time or calendar of the selected city is displayed on **digital display A**.



The way of selecting the city is different from above when setting the alarm ([AL1]/[AL2]). (→ page 26)

* UTC (Coordinated Universal Time)

This is the standard time around the world maintained by international agreement.

English



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World time function

■ The table of city names

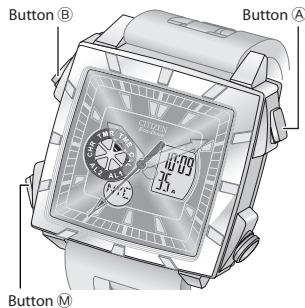
City code	City name	Time difference	City code	City name	Time difference
UTC	Coordinated Universal Time	±0	KHI	Karachi	+5
LON	London		DEL	Delhi	+5.5
PAR	Paris	+1	DAC	Dhaka	+6
ROM	Rome		BKK	Bangkok	+7
CAI	Cairo	+2	SIN	Singapore	+8
MOW	Moscow	+3	HKG	Hong kong	
THR	Tehran	+3.5	BJS	Beijing	
DXB	Dubai	+4	TYO	Tokyo	+9

The period of daylight saving time, time difference and city names may change depending on the situation of each country.

City code	City name	Time difference	City code	City name	Time difference
ADL	Adelaide	+9.5	MEX	Mexico City	-6
SYD	Sydney	+10	CHI	Chicago	
NOU	Noumea	+11	NYC	New York	-5
AKL	Auckland	+12	YMQ	Montreal	
HNL	Honolulu	-10	SCL	Santiago	-4
ANC	Anchorage	-9	BUE	Buenos Aires	-3
LAX	Los Angeles	-8	RIO	Rio de Janeiro	
DEN	Denver	-7			

Setting the time

Setting the time of the digital section [TME]



See page 22 to set the time of the analog section of this watch.

1. Press **button M** repeatedly to change the mode to [TME].
2. Press **button A** or **button B** repeatedly to select a city.
 - Select the city of your present location or the nearest one.



3. Press and hold **button B** until the daylight saving time indicator (**SMT**) starts flashing.

You can adjust the time now.

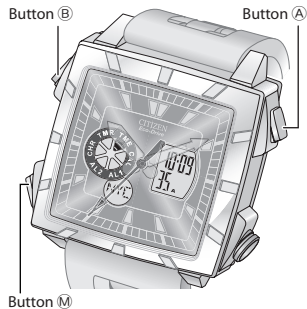
4. Set daylight saving time

- (1) Press **button A** to select ON or OFF (**OF**).
- (2) Press **button B** to confirm the selection and go to the next step.
 - The daylight saving time indicator (**SMT**) appears and the time advances by 1 hour if you have selected ON.

Daylight saving time is the institution which put time forward 1 hour for a certain period in summer.

- The setting is for each city and does not affect the time of the other cities.
- You cannot set daylight saving time when **UTC** is selected in step 2.





5. Set the second/minute/hour

- (1) Press **button A** repeatedly to set the flashing digit.
 - Press **button A** when the time tone tells 0 seconds to set second digit.
 - The digit changes continuously if you press and hold **button A** when setting the minute/hour.
- (2) Press **button B** to confirm the selection and set the next digit.



You can go to step 6 after setting hour digit.

6. Select 12-hour clock or 24-hour clock

- (1) Press **button A** to select 12-hour clock (12H) or 24-hour clock (24H).
 - If you select 12H, in the morning the AM indicator (**A**), and in the afternoon the PM indicator (**P**) appears.
- (2) Press **button B** to confirm the selection.
The time setting finishes and the time is displayed.



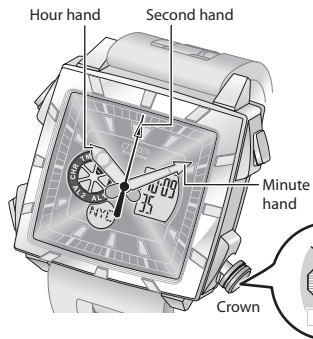
Interrupting the time setting

Press **button M**.

- The time setting is also interrupted in about 2 minutes without any operation. Adjustment before pressing **button M** is effective even when you interrupt the setting.

Setting the time

■ Setting the time of the analog section



See page 18 to set the time of the digital section of this watch.

1. Pull out **the crown** to position **1** when the second hand points to the 0 second position.

All hands stop moving. You can adjust the time of the analog section now.

2. Turn **the crown** to the left or right to adjust the time.

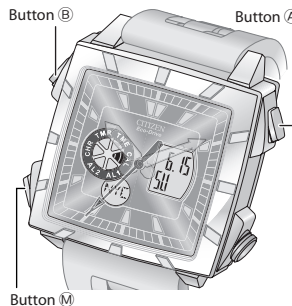


3. Push in **the crown** to position **0** on the time tone on a radio, TV, etc.

The time setting finishes. All hands start to move.



Setting the calendar [CAL]



1. Press **button M** repeatedly to change the mode to [CAL].



2. Press **button A** or **button B** repeatedly to select a city.
• Select the city of your present location or the nearest one.



3. Press and hold **button B** until the digit of month starts flashing.



You can adjust the calendar now.

Perpetual calendar

The date is automatically adjusted until December 31, 2099. So you do not need to correct it at the end of each month.

4. Set the month/day/year

(1) Press **button A** repeatedly to set the flashing digit.

- The digit changes continuously if you press and hold **button A**.



(2) Press **button B** to confirm the selection and set the next item.

When year is set, the calendar setting finishes.

- Day of the week is displayed automatically in conjunction with date.



5. Press **button M** repeatedly to change the mode to [TME].

Interrupting the calendar setting

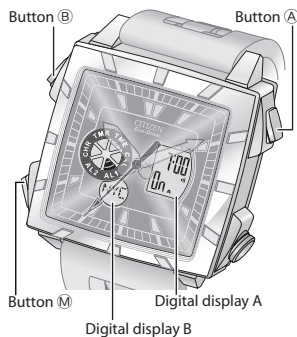
Press **button M**.

- The calendar setting is also interrupted in about 2 minutes without any operation. Adjustment before pressing **button M** is effective even when you interrupt the setting.

Using the alarm [AL1]/[AL2]

The way of setting the alarm are common to [AL1] and [AL2].

■ Setting the alarm



1. Press **button M** repeatedly to change the mode to [AL1] or [AL2].



or



The current alarm setting is shown on digital display A and B.

2. Press and hold **button B** until a city name starts flashing.



You can adjust the alarm now. The alarm switches ON automatically.

3. Select the city

- (1) Press **button A** repeatedly to select a city.
 - City names change continuously if you press and hold **button A**.




- (2) Press **button B** to confirm the selection and go to the next step.

4. Adjust the time of alarm (hour/minute)

- (1) Press **button A** repeatedly to set the flashing digit.
 - The digit changes continuously if you press and hold **button A**.



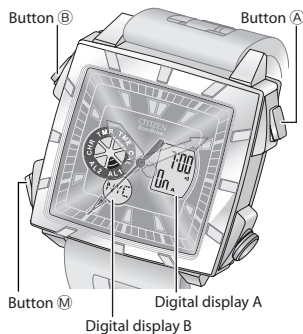
- (2) Press **button B** to confirm the selection and set the next digit.

When minute is set, the alarm setting finishes and the alarm indicator () appears.



5. Press **button M** repeatedly to change the mode to [TME].

Using the alarm [AL1]/[AL2]



Interrupting the alarm setting

Press **button M**.

- The setting is interrupted in about 2 minutes without any operation. Adjustment before pressing **button M** is effective even when you interrupt the setting.

When the on time comes

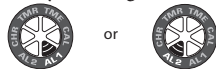
The alarm tone sounds for 15 seconds.

- To stop the alarm tone, press any button.

[AL1] and [AL2] will automatically change to [TME] in about 2 minutes without any operation after entering these modes.

■ Activating/deactivating the alarm

1. Press **button M** repeatedly to change the mode to [AL1] or [AL2].



The current alarm setting is shown on **digital display A** and **B**.

2. Press **button A** to select ON or OFF (**OF**).

- If you select ON, the alarm indicator (●) appears.

3. Press **button M** repeatedly to change the mode to [TME].



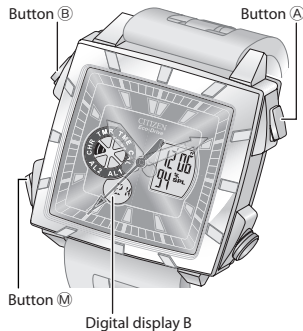
<To check the alarm tone>

The alarm tone is different between [AL1] and [AL2]. You can hear (check) the tones by pressing and holding **button A** in these modes.

- Release **button A** to stop the tone.
- Checking the alarm tone activates/deactivates the alarm.

Using the chronograph [CHR]

You can measure times up to 23 hours 59 minutes 59 seconds 99, per 1/100 seconds.



On measurement

- When the measured time passes over 24 hours 00 minutes 00 seconds 00, the measurement stops and the measured time is reset.
- Measurement continues even if [CHR] is changed to another mode.

1. Press **button M** repeatedly to change the mode to [CHR].



2. Press **button A** to start measurement.

The measurement indicator () appears.



- Each time you press **button A**, the measurement starts or stops.
- Press **button B** to display a split time for 10 seconds. While a split time is displayed, the split time indicator (**SPL**) flashes.
- The measured time of the hour digit is displayed on **digital display B**.



3. Press **button A** to stop the measurement.

The measurement indicator ()/split time indicator (**SPL**) will disappear.

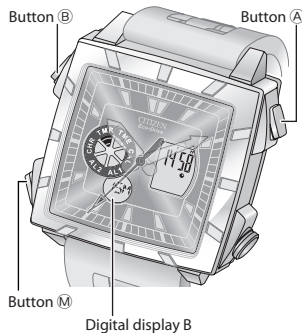
4. Press **button B** to reset the measurement time.



5. Press **button M** repeatedly to change the mode to [TME].

Using the timer [TMR]

You can set the countdown timer from 1 minute up to 99 minutes per 1 minute.



- 1. Press button (M) repeatedly to change the mode to [TMR].**



The last timer setting starts flashing and you can adjust the timer.

- 2. Press button (B) repeatedly to set the time.**



- If you press and hold button (B), the figure changes continuously.

- 3. Press button (A) to start countdown.**

The timer indicator (●) appears.

- Each time you press button (A), the countdown starts or stops.
- To restart the count from the set time, press button (B) while the timer is running.
- To reset the timer, press button (B) while the timer is stopped.



- 4. Press button (M) to change the mode to [TME].**



The timer continues even if [TMR] is changed to another mode.

When the set time has passed

The time-up tone sounds for 5 seconds and the timer finishes.

The timer indicator (●) disappears.


- To stop the time-up tone, press any button.

Troubleshooting


If you have a problem with your watch, check the table below.

Symptoms	Remedies	Page
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The hands do not work properly

The second hand moves only once every 2 seconds.	Charge the battery.	7
All hands stop moving.	Push in the crown to position  .	23
	Charge the battery.	6

The digital displays seem unusual

All indication on the displays are turned off as you take the watch out of the case.	The power saving function is activated. Cancel the function.	10
The measurement indicator () has not disappeared.	Stop the measurement of the chronograph.	30

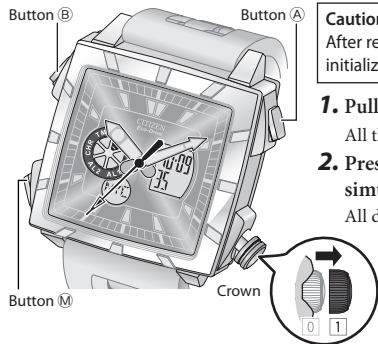
Symptoms	Remedies	Page
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Others

The alarm tone does not sound.	Activate the alarm.	29
	Confirm and correct the alarm setting.	26
The movement or indication is not normal.	Reset the watch. If the watch still does not work properly, contact the Citizen Service Center or the store where you purchased your watch.	36
The watch does not work properly even if you have tried the remedies stated in “Troubleshooting” (pages 34 and 35).		
The watch does not move even if the battery is fully charged. (→ page 8)	Contact the Citizen Service Center or the store where you purchased your watch.	–

Resetting the watch

The watch may not work properly if it is affected by static electricity or shock. In this case, reset the watch.



Caution

After resetting the watch, all settings are initialized. (→ page 37)

1. Pull out the crown to position 1.

All the hands stop moving.

2. Press buttons A, B and M simultaneously.

All digital display indications light up.

3. Push in the crown to position 0.

The watch is reset. The confirmation tone sounds and all digital display indications are canceled.

- The resetting will be also effective in about 2 minutes without any operation.

After resetting, adjust the time (→ pages 18–23) and calendar (→ page 24).

■ The initial settings

[TME]	AM12 : 00 : 00 / Daylight saving time : OFF (OF) / Display style : 12-hour clock (12H) / City code : UTC
[CAL]	January 1, 2008 / Tuesday / City code : UTC
[AL1][AL2]	AM12:00 / Alarm : OFF (OF) / City code : UTC
[CHR]	0 : 00 : 00 : 00
[TMR]	99 minutes

Precautions






WARNINGS

Water-resistance performance

Before use, confirm the water-resistance level of your watch indicated on the dial and case.

The unit “bar” is roughly equal to 1 atmosphere.

* “WATER RESIST(ANT) xx bar” may also be indicated as “W.R. xx bar.”

Indication		Specifications	Examples of use				
Dial	Case (case back)						
WATER RESIST(ANT) or no indication	WATER RESIST(ANT)	Water-resistant to 3 atmospheres	Minor exposure to water (washing face, rain, etc.)	Moderate exposure to water (washing, kitchen work, swimming, etc.)	Marine sports (skin diving)	Scuba diving (with an air tank)	Operation of the crown when the watch is wet
WR 50 or WATER RESIST 50	WATER RESIST(ANT) 5bar or WATER RESIST(ANT)	Water-resistant to 5 atmospheres	OK	OK	NO	NO	NO
WR 100/200 or WATER RESIST 100/200	WATER RESIST(ANT) 10bar/20bar or WATER RESIST(ANT)	Water-resistant to 10 or 20 atmospheres	OK	OK	OK	NO	NO

Continued on the next page



Precautions

- Water-resistance for daily use (up to 3 atmospheres):
This type of watch is resistant to minor exposure to water. For example, you may wear the watch while washing your face; however, it is not designed to be used underwater.
- Upgraded water-resistance for daily use (up to 5 atmospheres):
This type of watch is resistant to moderate exposure to water. You may wear the watch while swimming; however, it is not designed to be used for skin diving.
- Upgraded water-resistance for daily use (up to 10/20 atmospheres):
This type of watch may be used for skin diving; however, it is not designed to be used for scuba or saturated diving using helium gas.
- Be sure to use the watch with the crown pressed in fully (normal position) to ensure the water resistance. If the crown of your watch is the screw down crown, be sure to tighten it completely.
- Do not operate the crown or buttons when the watch is wet.

- If water has penetrated the watch, or if the inside of the glass is fogged up and does not become clear in a day, take the watch to your dealer or Citizen Service Center for repair. Leaving the watch in such a state will rust the internal parts and cause malfunction.
- If seawater penetrates the watch, place the watch in a box or plastic bag and immediately take it in for repair. Otherwise, the pressure inside the watch will increase, and parts (glass, crown, buttons, etc.) may come off.
- If the watch is used in seawater, rinse with fresh water afterward and wipe with a dry cloth.

Keep your watch clean

- Keep your watch clean to prevent rust or dirt building up on the watch. They may stain your clothes.
- Wipe off dirt on the leather band with a soft and dry cloth to prevent it from discoloring.



Precautions

WARNINGS

Handling the secondary battery

- Do not remove the battery. When it is required, keep the battery out of the reach of children to prevent them from swallowing it.
- If the battery is swallowed, consult a doctor and seek medical treatment.

CAUTIONS

Cautions about charging

- Excessively high temperature at charging battery may cause discoloration and deformation of the exterior, and malfunction of the movement.
- Do not charge the battery at a high temperature (about 50°C/122°F or higher).
Examples:
 - charging the battery by light such as an incandescent lamp or halogen lamp
 - charging the battery where the temperature becomes extremely high—such as on the dashboard

To avoid injury

- DO NOT wear the watch where the temperature becomes extremely high—such as in a sauna. Otherwise the watch may become hot and cause skin burn.

To avoid malfunction


- DO NOT use the watch where the temperature is lower or higher than the operation temperature specified in the instruction manual. Doing so may cause the watch to malfunction or stop.
- DO NOT place the watch nearby any materials generating a strong magnetic field such as:
 - magnetic health equipment such as a magnetic necklace
 - a magnetic latch of a refrigerator door
 - a magnetic clasp on a handbag
 - speakers of a mobile phone
 - electromagnetic cooking devicesThey may interfere with the movement of the stepping motors in the watch and timekeeping becomes inaccurate.

Precautions

- DO NOT place the watch nearby household appliances generating static electricity. Timekeeping may become inaccurate if the watch is exposed to such strong static electricity as that which is emitted from a TV screen.
- DO NOT apply any strong shock, for example, by dropping it onto a hard floor.
- Avoid using the watch where it may be exposed to chemicals or corrosive gases. If solvents, such as thinners or benzine, or substances containing such solvents come into contact with the watch, discoloration, melting, cracking, etc. may occur. The case, band, or other parts may become discolored if the watch comes into contact with mercury, such as that used in thermometers.

Maintenance

Daily maintenance

- Rotate the crown while it is pressed in (position ) and press the buttons periodically so that they will not be rusty.
- Wipe off dirt, perspiration, and water from the case and glass with a soft cloth.
- To clean a metal, plastic, or rubber watchband, wash away dirt with water. Use a soft brush to remove dust and dirt stuck in the gaps in a metal band.
- Do not use solvents (thinner, benzine, etc.), as they may damage the finish.

Periodical inspections

Your watch needs an inspection once every two or three years for safety and longer usage. To keep your watch water-resistant, the packing needs to be replaced regularly. Other parts need to be inspected and replaced if necessary. Ask for genuine Citizen parts upon replacement.

Specifications

Model	U20*
Type	Combination solar-powered watch
Timekeeping accuracy	Within ± 15 seconds per month on average (when worn at normal temperatures between $+5^{\circ}\text{C}/41^{\circ}\text{F}$ and $+35^{\circ}\text{C}/95^{\circ}\text{F}$)
Operating temperature range	$0^{\circ}\text{C}/32^{\circ}\text{F}$ to $+50^{\circ}\text{C}/122^{\circ}\text{F}$
Display functions	Analog section: <ul style="list-style-type: none"> • Time: Hours, minutes, seconds Digital section: <ul style="list-style-type: none"> • Time: Hours, minutes, seconds (12-hour/24-hour) • Calender: Year, Month, Date, Day of the week • City code
Battery duration without recharging	Fully charged to empty: Approx. 8 months Two seconds interval movement to stopping: Approx. 4 days
Battery	Secondary battery, 1pc.

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Additional functions	<ul style="list-style-type: none"> • Power saving function (battery saving mode) • Overcharge prevention function • Insufficient charge warning function • World time function • Daylight saving time ON/OFF • Perpetual calendar (until December 31, 2099) • Alarm [AL1]/[AL2] • Chronograph • Timer
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Specifications are subject to change without prior notice.

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