## CITIZEN QUARTZ Racing Chrono

Model No. JNOXXX Caliber No. C310

- Instruction Manual

CTZ-B6770


This is a combination watch which can conveniently display data while watching races (car, bike, etc.)

Thank you for purchasing a CITIZEN QUARTZ Watch. To ensure correct use, please read these instructions carefully. Please confirm that the CITIZEN International Guarantee Card is included for your possible claim.
A. Five Features

1. Lap time, lap number are displayed.
2. By setting the distance of one lap around a race circuit, the speed is displayed.
3. When the racing ends, the race's

- Best lap time, the lap number, and speed
- Average lap time and average speed
- Total time and total laps can be displayed.

4. There is a "hand retractor function" that prevents the analog hand from covering parts of the display.
5. The timer can be selected from "analog (hand) display" or "digital display" (You can use both at the same time).
B. Name of Parts


## C. Switching the Mode

This watch has the following 4 main functions (modes) can be switched by pressing button $\mathbb{( 1 )}$. <Note>
When changing modes, make sure you have pressed button $(\mathbb{M})$ in properly to change modes.

D. Adjusting the Time and Calendar

1. Set the mode to (Time/Calendar) mode by pressing button $\mathbb{( 1 )}$.
2. Pull out button $\mathbb{A}$.

- The second hand will return to the " 0 " position.
- The day of the week will disappear and the seconds will flash in the digital display.
- "SET" will appear in the digital display.
* At the time, if the second hand does not return to the " 0 " position, please refer "Hands standard position" on page 17, and perform operation.

3. Press button (A) to select the flashing digit you wish to adjust,
4. Adjust the flashing digit of the time with button ( $\mathbb{1}$.
5. Push back button © $\mathbb{A}$ to the normal position after completing the time adjustment.

- All hands will move to the adjusted time automatically.
- The digital display will return to the normal display.

The analogue time and the digital time in this watch are synchronised. If you adjust the digital time, the analogue time is adjusted automatically.


## E. Alarm Function

## Setting the alarm time

1. Press button $\mathbb{( 1 )}$ to set the digital mode mark to (ALM) mode.
2. Pull out button $\mathbb{( 1 )}$. The hour digit in the digital display will flash for the alarm set time 'Set' will appear in the digital display.
3. Press button (A) to select the digit (hour/minute).
4. Press button (c) to set the alarm time.
5. Push back button $\mathbb{( 1 )}$ to the normal position after complete adjustment.

* Press any button to stop the alarm sound.
<Note>
The alarm sound may sometimes start and stop.
This is because when the watch hands move, the alarm sound is momentarily adjusted.

Switching the alarm 'ON/ OFF' with button (C.
The alarm time and normal time (12/24 hour system) are synchronised. When


A/P is displayed, make sure AM/PM are set correctly.

## F. Timer Function

This timer can be set to the maximum of 60 minutes in minute.
For the timer, by pressing button (C) you can select between "analogue display" or "digital display". (You can not use both at the same time).

## Timer setting

Both the analogue and digital settings are the same way.

1. Press button $\mathbb{( 1 )}$ to set the mode mark to (TMR) mode.
2. Pull out button (iM).

- The timer setting time will flash in the digital display.
- "SET" will appear in the digital display.

3. Press button (C) to set the time.

- When using the analogue hands for the timer, the function hand (a small hand on the 12 o'clock direction) will move according to the timer setting time.

4. Push back the button (II) to the normal position.


## Using the Timer

1. Start/Stop

- By pressing button (A) the timer will start and stop.

2. Reset

- When the timer is stop, press button (C) to return the timer to the set time.

3. Time up

- Alarm will ring for 5 seconds
- While the alarm sounds, press any button ( $(1)$, (A), (B), (C) to stop.

4. Timer restart

When the timer is timing, press button (C) to return the timer to set time and the timer will restart timing again.

## G. Chronograph Function 1

This chronograph can measure up to 99 hours, 59 minutes, 59 seconds, 9 . After that it will stop at 0 hours, 00 minutes, 00 seconds, 000 . Measurement time will display in the digital display. The analogue hands will also show "Seconds" "1/10 seconds" hand will display only when the chronograph has been stopped. (While the chronograph is stopped or while checking the lap time) $1 / 10$ second hand will stop at the 0 second position after 1 minute of timing. After that, it will point to the correct $1 / 10$ second time when the chronograph has stopped. The chronograph has stopped. The chronograph will measurement in $1 / 1000 \mathrm{sec}$. units up till 60 minutes, and in $1 / 10 \mathrm{sec}$. units from 60 minutes on.


## Standard measurement

Press button (M) to set the digital mode mark to the (CHR) mode.

1. Press button © to start timing.

- The chronograph's number of timing display changes from " 0 " to " 1 ".

2. While timing press button (A) to stop.
"BEST LAP" etc. will appear in the digital display, however it is not required when operating the standard measurement.
3. Press button (A) again to restart the chronograph from "0 hour, 00 minute, 00.000 sec ".

- The chronograph number of timing display changes from " 1 " to " 2 ".

4. In that way with button (A) it is possible to repeat the start/stop operation.

- The chronograph display gains "1" every time, until it reaches a maximum of " 99 ". After that it will repeat from "0".
- The chronograph starts from "0 hour, 00 minute, 00.000 sec " every time it is started.

5. Press button (C) to reset after measurement.

The time and the number of timing will reset to " 0 ". <Note>
When the alarm sounds, the hands may stop, but they will revert to the correct timing after the alarm sounds stop. The digital display continues timing correctly.

## H. Chronograph Function 2 (Racing Chronograph)

## Setting the distance of one lap around the race circuit

When using the racing chronograph, in order to calculate the km per hour of the car, the distance of one lap around the race circuit must be input.
So before you start timing, set the lap distance.

1. Reset the chronograph and then depressing button (A) for 2 seconds or more.

- The chronograph will initially start, however after 2 seconds the display will switch to the lap distance setting display.

2. Distance setting

- Setting range is " 00.000 " km - " 99.999 " km (1 metre) units.
- Select the digit you wish to to set with button (A) set the distance with button (C).
- Press button (A) to select " 0.001 " km digit then by pressing button (A) again, you can return from distance setting to the reset condition.



## When timing one lap

1. Press button (A) to start timing
2. When the car you are timing completes one lap, press button (A) to stop timing.

- In the digital display "BEST LAP" will appear.
- km an hour of the lap will display. Only between "0.0-999.9" km per hour can be displayed.
- Over 1000 km per hour "---.-" will display.

3. After several laps, to time other cars, press button
(A) again. The watch will start timing from " 0 " again.
4. When the car you are timing completes the lap press button (A).

- If the timing of the lap is faster than previous times "BEST LAP" in the digital display will appear. If the lap is slower, just "LAP" will appear.

5. Press button (A) you can repeat the start/stop function.

- The number of timings display is up to " 99 ". After that it will continue from "0" again.

6. When one race has finished and you wish to time the next race, press button (C) to reset the chronograph.

- The time, and number of timings will be reset to "0".



## When you time continuous laps

1. Press button (A) to start timing.
2. Press button (c) to measure the lap time of the present lap.

- The lap time will display. (The watch automatically starts timing the next lap.)
- "BEST LAP" will display.
- km an hour of this lap will display.
- After displaying this data for 10 seconds, it will automatically change to the next lap timing display.
- At that time, the number of timings display will change from "1" to " 2 ".

3. Repeat this operation for every lap.
(Press button (C) to measure the lap time.)

- When the lap is the fastest yet "BEST LAP" in the digital will appear, in other cases "LAP" will appear.
- The number of timings display is up to " 99 " after that it will continue counting from " 0 ".

4. When the last lap of the race ends press button (A) to complete timing.
5. When you wish to measure time the next race, press button (c) to reset the chronograph.

## Retrieving memorised data

Until the chronograph is used again, the memory data can be retrieved. The memorised items
 are as follows:

- Best lap display
- Average lap time display
- Total time display
<Note>
If you reset the chronograph, then start timing all memorised data will be deleted. So if the data is needed, it would pay to make a memo. Calling up to chronograph memo.


## Calling up to chronograph memo

 [Aubrage laptine dieplay]


1. Press button © to reset the chronograph.

- All displays change to " 0 ".

2. Press button (C) again

- It changes to the best lap display

3. Press button (C)

- It changes to the average lap time display

4. Press button (C)

- It changes to the total time display.

5. Press button (c) again to return to the reset mode.

## I. Convenient Function to Note

## When the display is difficult to read due to the

 analogue hands converting the display.In that case, it is possible to move the hands using the "Hands retractor function". Pressing button (B) for 2 seconds or more, hour, minute, second hands will continue to retract until the 12 o'clock position. If you press button (B) while the hand will stop at that position, and be in the hand retractor condition.

## [Cancellation of the hands retractor function]

Press button (B), The hands retractor function will cancel. The hour, minute hands will fast forward to the correct time.
<Note>
When using the chronograph while the hands retractor function is operating, all hands are stationary.

## Using the dual time

Setting the local time (to another city).

1. Set the watch to (Time/Calendar) mode.
2. Depress button (A) for 2 seconds or more.

- The hour and minute hands advance only 30 minutes. (The time difference between countries around the world are in 30 minute intervals.)

3. Depress button © for 2 seconds or more.

- The hour, minute hands will backward for 30 minutes.

4. Perform these operations (2 or 3 ) to adjust the local time.
[Cancellation of the local time] Cancellation of the local time, press button (A) and (C) simultaneously.


## J. When the Watch's Display is Abnormal

After replacing the batteries, or when the watch receives a strong shock due to being accidentally dropped, etc., the watch may show unusual characteristics (display disappears, alarm continues sounding etc.). In that case perform these three operations in this order.

1. All reset
2. Hands standard position setting
3. Time setting

## [All reset]

1. Pull out button (10).
2. Depress the buttons (A), (B), (C) simultaneously for 2 seconds or more.
All digital segments will appear.
3. Push back button (M) to the normal position - An alarm sound will ring twice, and the watch will start.


THF wh appeir at the right luand uep of the digtal dimploy
[Hands standard position setting]

1. Press button (M) to set the watch to the (CHR) mode
2. Pull out button (ID)
3. Press button (A) or button (C) to set the function hand to on the 12 o'clock position.
4. Press button (B)

The display in the digital display will change from
"F.H" to "H.R".
5. Press button (A) or button (©) to set the hour, minute hands, and 24 hour hand to the 12 o'clock position.
6. Press button (B) once

- The display in the digital display will change from "H.R" to "SEC".

7. Press button (A) or button (C) to set the second hand to the 12 o'clock position.
8. Push back button (10) to it's normal position. <Note>
The hands standard position setting is different from time adjustment. Set the time after this operation.

## K. Tachymeter

Tachymeter is a function that measures the speed of a car, etc. With this watch depending on the amount of seconds it takes to travel 1 km (measuring range is within 60 sec .) the approximate average speed over that distance can be measured.
Start the chronograph when you start measuring. When 1 km has been progressed stop the chronograph. When you stop the chronograph after progressing 1 km , the approximate average speed over that distance can be determined with the present position of the second hand. If you progress 1 km in 45 seconds, the average speed over that distance is approximately 80 .


## L. Precautions

Water resistance

*Always set the crown in the normal position

## Water Resistance

- To prevent water coming into contact with the internal mechanism of the watch, the crown should under no circumstances be pulled out while the watch is wet,
- If watches designed for sports or working in the water are exposed to salt water or significant amounts of sweat, they should be rinsed in fresh water and dried thoroughly.
- Exposure to water may affect the durability of some types of leather bands.
- Because the internal watch parts may hold some moisture, if the external temperature is lower than that inside the watch, the glass covering the watch face may fog up. If this fogging up is only temporary it causes no problem, however, if it persists over a long period of time you should discuss the matter with a salesperson at the shop where you purchased the watch or at a Citizen Service Centre.


## Temperature

Avoid exposing the watch to direct sunlight or leaving it in extremely hot or cold locations for a long period of time.

- This will cause malfunctioning and shorten the life of the battery.
- This may cause your watch to gain or lose time and affect its other functions


## Shock

- This watch will withstand the bumps and jars normally incurred in daily use and while playing such non-contact sports as golf, etc.
- Dropping the watch on the floor or otherwise imparting severe shock to it may cause malfunctioning or damage.


## Magnetic Fields

This watch is antimagnetic up to 60 gauss and not affected by the magnetic fields produced by normal household electric appliances. If used in the immediate vicinity of strong magnetism, however, the watch's functions may be affected.

## Static Electricity

The integrated circuits used in the watch are sensitive to static electricity. If exposed to intense static electricity, the watch's display may lose its accuracy.

## Chemicals and Gases

Avoid wearing the watch in the presence of strong chemicals or gases. If the watch comes in contact with such solvents such as thinner and benzine or products containing materials such as gasoline, polish, detergent or adhesive, its components may discolour, dissolve or crack. Be especially careful to avoid chemicals. The watchcase or band may discolour if they come in contact with mercury from a broken thermometer or other equipment.

## Keep Your Watch Clean

Wipe off soil and moisture from the glass with a soft, dry cloth. If you wear the watch with the back side of the case and the watch is soiled they may cause a skin rash as they come in direct contact with the skin. Keep your watch clean to avoid staining your cuffs. How to clean the watchband:

- Metal band - Wash soiled parts with a toothbrush in mild, soapy water.
- Plastic or rubber band - Wash in water. Do not use solvent.
- Leather band - Rub lightly on the front side with a soft cloth. Use a cloth moisturised with alcohol to clean the under side.


## Periodic Inspection

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

## Be sure to keep the batteries out of reach of infants and small children.

## Should accidental ingestion occur, consult a

 doctor at once.- Refer to the diagram on "water resistance"


## M. Specifications

1. Type: Combination (Analogue + Digital) quartz watch
2. Time accuracy: (when worn at $5^{\circ} \mathrm{C}-35^{\circ} \mathrm{C} / 41^{\circ} \mathrm{F}$
$-95^{\circ} \mathrm{F}$ ) within $\pm 20$ seconds per
month
3. Operating Temperature Range: $0^{\circ} \mathrm{C}-50^{\circ} \mathrm{C}$
$\left(35^{\circ} \mathrm{F}-122^{\circ} \mathrm{F}\right.$ )
4. Functions:

- Time/Calendar: (hour, minute, second)/
(month, date, day of the week)
Alarm: Hour, minute, ON/OFF.
- Racing:

100 Hour Chronograph in 1/1000
second increment (less than 60 minutes)
Lap time display
Lap number display 0-99
Speed calculation: 0.0-999.9 (km an
hour)
5. Battery Number: 280-44 (SR927W)
6. Battery Life: Approximately 2 years (after installing a new battery under normal use)

* Specifications are subject to change without notice.

