

CITIZEN QUARTZ Racing Combo With Electroluminescence

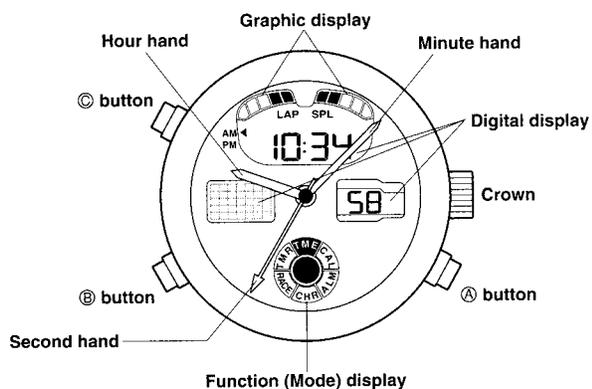
Model No. JN7XXX
Cal. No. C401

• INSTRUCTION MANUAL

CTZ-B6783

This watch is a combination watch which has a convenient stopwatch function for timing circuit races and measuring competition (races). It has EL (Electro Luminescent) that evenly illuminates the display to make it easy to view in the dark.

Names of Parts



EL (Electro Luminescent) Illumination EL

Electroluminescence refers to the emission of light by a phosphorescent substance under the influence of an applied voltage.

The display panel of this watch provides illumination by electroluminescence.

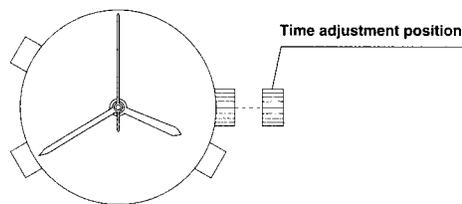
EL illumination

The EL panel will be illuminated under the following circumstances:

1. When pressing button (A) in time mode, or calendar mode.
2. When displaying stop state or split time state in chronograph mode.
3. When displaying stop state or lap time state in race chronograph mode.

Adjusting the Analog Time

At the time adjustment position, turn the crown to adjust the time.

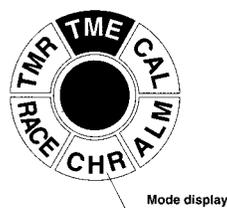


The analog time and the digital time can be adjusted separately, so you can use this watch as a dual time watch.

Switching Functions (Modes)

Other than the time, this watch has five functions: Calendar, Alarm, Chronograph, Race Chronograph, and Timer.

Each time you press button (C) the mode will change.

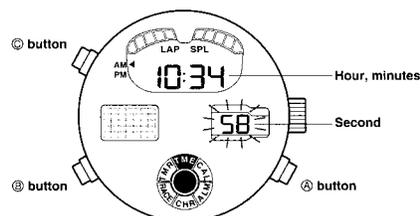


TME: Time
CAL: Calendar
ALM: Alarm
CHR: Chronograph
RACE: Race Chronograph
TMR: Timer

If left in the alarm mode for more than 2 minutes, it will automatically return to time mode.

Adjusting the Digital Time and Calendar

Adjusting the time <TME mode>



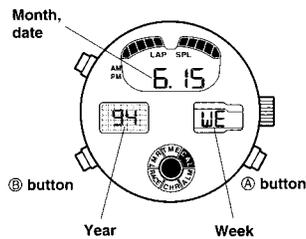
Adjusting seconds

1. In time mode, press (B). For more than 2 seconds, "second" will flash, and change to adjusting state.
2. While seconds flash, press and release button (A) to reset the seconds to 00.

Adjusting the time

1. When in the seconds adjustment state (seconds flash), press button (B), the flashing digit will change in the order of seconds – minutes – hours – 12/24 hour system. Select the digit you wish to adjust.
2. Adjust the flashing digit by pressing button (A).
 - Press button (A), the 12/24 hour will switch alternately.
 - If the time adjustment state (flashing digit) remains for longer than 2 minutes the watch will automatically return to normal time display mode.
 - Press button (C) while in the time adjustment state, you can return the watch to normal display mode (Manual return).

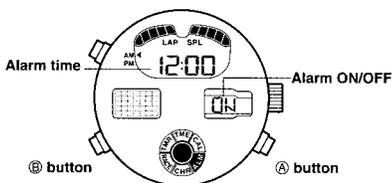
Adjusting the calendar <CAL mode>



In the same way, to make adjustments while in the calendar mode, press and hold button (B) for more than 2 seconds to select the digit to adjust (will flash), then press button (A) to adjust.

- Year can be set from 1994-2099 in the calendar.

- The day of the week will automatically be set by adjusting the Year, Month, Date.
- When setting a date that doesn't exist (e.g 30 Feb), upon returning to the normal display, the first day of the month will be displayed automatically.
- Due to the autocalendar, no adjustment at the end of the month is required.



Using the Alarm [ALM]

Setting the alarm time uses the same procedure as setting the time and calendar.

In the alarm mode

<ALM> press button (B) to select the digit to adjust (flashing), then set the time you wish the alarm to sound, with button (A).

- When the time mode is in the 12 hour display, the alarm time is also in the 12 hour display, so check the AM/PM.
- The alarm sound can be stopped by pressing any button.
- The alarm will sound for 20 seconds.
- In the alarm mode, while pressing button (A), the alarm monitor will sound.

Alarm ON/OFF

Switch the alarm ON/OFF by pressing button (A).

Chronograph Mode and Race Chronograph Mode

The differences in usages

Chronograph mode is convenient when measuring normal production rates and split time measurements. Race chronograph mode is convenient when measuring each lap as in a circuit race. Two kinds of data, the best lap time and goal time, can be called up. For detailed usage, see explanation for each mode.

Note

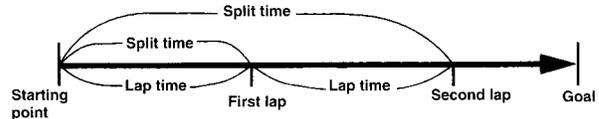
Because chronograph mode and race chronograph mode cannot be used at the same time, select one before using.

If one of the chronograph modes is in the measuring state or stop state (except "00 hours 00 minutes 00.00 seconds" display), when changing the modes, you cannot switch to the other chronograph mode.

Split time and lap time

Split time.....an intermediate point between start and finish.

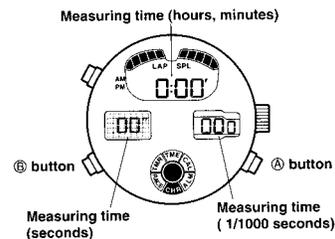
Lap time.....Time for one circuit.



Using the Chronograph [CHR]

This chronograph can measure and display a maximum of "23 hours 59 minutes 59.99 seconds" in increments of 1/1000 second. After completing 24 hours of measuring it will return to "00 hours 00 minutes 00.00 seconds" and stop. Also split time (elapsed) measuring is possible.

Chronograph measurement



Measurement

1. Start/Stop of chronograph is performed with button (A). (While measuring, by pressing button (A), you can repeat start/stop as many times as you like).

2. When stopped, press button (B) to reset.

* While measuring, press button (B) to display the split time for 10 seconds.

Using the Race Chronograph [RACE]

Race Chronograph <Lap time measurements>

While using chronograph, this mode cannot be used

This race chronograph can measure maximum 23 hours 59 minutes 59.999 seconds in 1/1000 second increments. After measuring 24 hours, it will return to "00 hours 00 minutes 00.00 seconds" then stop. After measuring the best lap time and goal time (total time), each can be retrieved as memo.

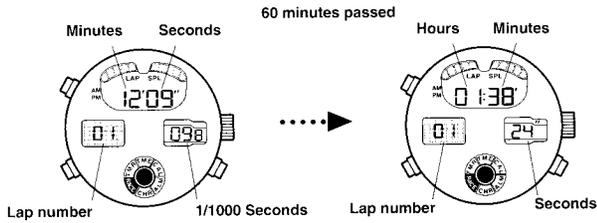
Accumulated elapsed time measurement

1. Start and stop with button (A).
Each time it starts, the lap number gains one, and will display a maximum of "99". After that it will repeat from "00".
2. When stopped, press button (B) to reset.

Note

Race chronograph starts from 00 hours 00 minutes 00.000 seconds at every starting point.

Display on watch while timing



“Minutes, Seconds, 1/1000 second” will display till 60 minutes. After that it changes to “Hours, Minutes, Seconds” display.

Measuring a series of laps

1. Start with button (A).
2. While measuring, press button (B) to display lap time for 10 seconds, it will return to measuring of the next lap automatically. (At that time, the lap number will gain one).
3. By repeatedly pressing button (B) you can measure the lap time as many times as you like. Each time you press button (B), the lap number will gain one, and display up to a maximum of “99”. After that, it will repeat displaying from “00”.
4. When the last lap is measured, press button (A) to stop. Press button (B) to reset.

Retrieving Memo

When measuring in race chronograph mode:
The following two types of data will be memorised as memo. You can retrieve them after measurement is completed.

Best lap data: The time and the lap number are displayed at recall.

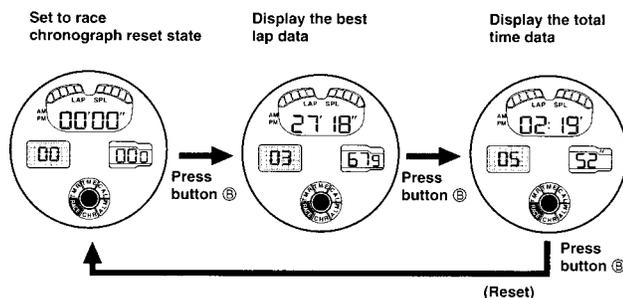
Goal time data: The time between start and finish, and the lap number, are displayed at final stop (goal).

- While displaying memo, it is not possible to start race chronograph.
- The memo will be deleted with the next start operation after resetting.

Note

Memo will be deleted by the following race chronograph start operation, or the all reset operation, so it would pay to record the necessary data elsewhere.

Retrieving memo

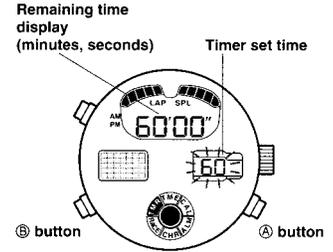


Using the Timer [TMR]

The timer can be set from 60 minutes in one minute decrements. When timer time is up, the timer will sound for about 5 seconds. After that it will return to timer set time.

Timer set

In timer mode, while the set time is flashing, each time you press button (B), the timer set time will be reduced by one minute.



Using the timer

1. Press button (A) to start the timer.
2. While measuring, press button (A) to stop the time. In the stop state, press button (A) to start again.
3. When in stop state, press button (B) to reset to timer set time.

Timer restart function (flyback)

While using the timer, press button (B) to return to timer set time manually and restart automatically.

All Reset Operation

After replacing the battery, or when the watch's display malfunctions due to a strong shock (no display, alarm continuously sounds, etc.), perform the all reset operation as follows:

1. Pull the crown out.
2. Press the buttons (A), (B), (C) simultaneously (while you are pressing the buttons, the display will disappear).
3. Release the buttons (all display segments will appear).
4. Press the crown back in (at that time an alarm will sound).

The all reset is complete. Adjust each mode correctly before using.

EL Character Replacing EL Panel

EL panel has the following characteristics.

- When the battery voltage decreases, so will the brightness.
- It is sensitive to dampness. In case the watch gets wet inside, have it serviced, as soon as possible.
- Depending on the accumulative usage time of the EL (Emitting time), the brightness will decrease. If the emitting display starts to go dark, and the face becomes hard to read, take it to the shop from which you brought it, or the nearest Citizen Service Centre, and ask for the EL panel to be repaired. You will be charged for the service.

Precautionary Items (and usage limitations)

Classification	Specification	Indication		Water-related use				
		Dial	Case back					
Non water resistance	Non	Non	Non	NO	NO	NO	NO	NO
Water resistance for daily life	3 bar water resistant watch	Non	WATER RESIST (ANT)	OK	NO	NO	NO	NO
Reinforced water resistance for daily life	5 bar water resistant watch	WATER RESIST WR****** bar	WATER RESIST (ANT)	OK	OK	NO	NO	NO
	10 bar/20 bar water resistant watch			OK	OK	OK	NO	NO

Water Resistance

Refer to the table for water-resistance performance after checking the water resistance characteristics inscribed on the face and back of the watch.

- * Always set the crown in the normal position.
- * While working with water and using as a water-resistant sports watch, when the watch is dipped in sea water or after a lot of sweat, please rinse it well in fresh water and dry it well with a cloth.
- * Leather straps have characteristics that may affect their durability after getting wet.
- * Because there is always moisture inside the watch, when the air temperature is lower than inside the watch, the surface of the glass may fog. If fog remains only temporarily there is no problem, but if it doesn't disappear after a long period of time, please consult the shop from which you purchased it or a shop dealer with Citizen watches.

Temperature

- Do not expose the watch to direct sunlight or high temperatures for a long period of time, as this may shorten battery life.
- Do not expose to extreme cold for a long period of time. This may reduce accuracy. Normal accuracy returns when the watch is restored to normal temperature.

Strong shocks

- This watch is designed to withstand external shocks such as those associated with golfing or playing ball.
- Avoid dropping it or subjecting it to other strong jolts.

Magnetic fields

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

Chemicals, gas and mercury

Do not expose it to chemicals or gases. Be careful when using chemicals. Solvents such as benzene and paint thinner (and products containing solvents such as gasoline, nail polish remover, certain chemicals and adhesives) may cause discoloration, melting and or cracking of the watch case. Do not expose the watch to mercury, such as that from a broken clinical thermometer, since mercury could discolor the case, face and band of watch.

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 accuracy.

Keep your watch clean

- Wipe off any dirt or water on the glass case with a soft cloth.
- Since the band is in constant contact with your skin, always keep it clean. A dirty band may cause a slight reaction in people with sensitive skin.
- Always keep the band clean of any dust or dirt. Dust and dirt on the band may stain the shirt sleeve.

Metal watch bands: Metal watch bands can be cleaned with a toothbrush, soap, and water.

Leather bands: Wipe off the front side of the band with a soft dry cloth, and remove stains on the back side of the band with a cloth moistened with alcohol.

Plastic or rubber bands: Wash in water. (Avoid using solvents as they may cause the band to dissolve.)

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

Specifications

1. **Caliber No...** C401
2. **Type...** Combination (Analog & Digital) quartz watch
3. **Time accuracy...** (5°C-35°C/41°F-95°F) within ± 20 seconds/month
4. **Operation temperature range...** 0°C-55°C/
32°F-131°F
5. **Available functions...** Time: Hour, Minutes, Seconds
Calendar: Year, Month, Date, Day of the week.
Daily Alarm:
Chronograph: 24 hour measurement (1/1000 second increments) split time.
Race chronograph: 24 hour measurement (1/1000 second increments) lap time, memo function.
Timer: 60 minute countdown (One minute decrements)
6. **Additional functions...** EL illumination function
7. **Battery...** No. 280-44 Code SR927W
8. **Battery life...** Approx. 2 years (alarm sound 20 seconds/day, timer time up sounds 5 seconds/day, EL illumination 3 seconds/day)

Note:

Battery life will maintain stable accuracy for about 2 years under normal conditions (as in above conditions) after installing a new battery. However the battery life will change depending on the frequency that the alarm, chronograph and EL illumination are used. The above specifications may be changed due to improvements, without notice.