# CITIZEN QUARTZ Magic Light 

# Model No. JQ5XXX Cal. No. C430 

## - Instruction Manual

## CTZ-B6779

Thank you for purchasing a CITIZEN QUARTZ WATCH. To ensure correct use, please read these instructions carefully. Please ensure that the CITIZEN International Guarantee Card is supplied with watch on purchase, that you may claim the guarantee service (subject at terms of guarantee).

## A. FEATURES

- This sophisticated combination quartz watch is equipped with functions that are ideal for mountain biking, racing and other biking activities.
- It is equipped with an EL (Electroluminescent) panel that enable the display to be seen even in the dark locations.
B. NAME OF PARTS

+ Bome modeba alas lature a rugater ting.


## C. SETTING THE ANALOG TIME

## Note

The analogue display and the digital display are completely independent. Digital operations are unaffected by changes to the analogue time.


1. Pull out the crown. The second hand will stop moving.
2. Turn the crown to set the time.
3. Push the crown back to the normal position.
D. EL (ELECTROLUMINESCENT) ILLUMINATION

- EL refers to the emission of light by a phosphorescent substance under the influence of an applied voltage.
The panel of this watch provides illumination by EL.


## Illumination method

The EL panel will be illuminated under the following conditions.

1. When pressing © button in time/calendar mode.
2. When displaying stop state or split time state in chronograph mode.
3. When displaying stop state or split time state in chronograph memory mode.

Characteristics and replacement of the EL panel
The EL panel has the following properties:

- When the battery voltage drops, the brightness (intensity) also drops.
- It is adversely affected by humidity. If any water enters inside the watch by accident, promptly request repair.
- The EL panel has a finite life span. The brightness (intensity) gradually drops in proportion to the total number of hours of use (light emission).
If the display appears dark or is hard to see when the EL panel comes on, ask either the store you purchased the product or your nearest Citizen Service Centre to replace the EL panel.
E. MODE SWITCH-OVER

Each time (B) button is pressed, the modes will change as follows.


```
1: Thas wifch astorentically rehums so Time/Calentar Mode \(A\) ieh in Narm Mode tormgre tim 2 minutes
``` ; Press har 2 sevonds or mare. Pess onca. Flashes
4 :Contenation beop

\section*{F. OPERATIONS COMMON TO ALL MODES}
* Auto return: If, while the watch is in the setting mode, there is no input for 2 minutes or more, it will automatically return to normal mode.
* Quick return: If at any point during setting (B) button is pressed, the display returns to normal mode (except in pace timer).
* Quick advance: Depress © button for quick advance when setting time/calendar alarm and timers.

\section*{G. SETTING AND USING THE DIGITAL MODES}
1. Time/Calendar Mode (TME)


\section*{a. Adjustment of seconds}
1. When the (A) button is pressed for 2 seconds or more, the watch enters adjustment mode with the seconds flashing.
2. When the (C) button is pressed the seconds are flashing, the seconds display is reset to " 00 ".

\section*{b. Adjusting the time/calendar}
1. Each time the (A) button is pressed during the adjustment mode (when the seconds are flashing), the flashing display changes sequentially. Press the (A) button the required number of times to reach the display to be adjusted.
2. Press the © button for each digit adjustment.
- For the 12 -hour display, note AM/PM.
- Auto return: If the watch is left in the adjustment mode (while any display is flashing) for 2 minutes without operating any buttons, the auto-return system to the normal time display.
- The calendar can be set from 1995 to 2080.
- The day of the week is automatically set when the year, month and date are adjusted.
- If a non-existent date (for example, February 30) is set during adjustment, the time/calendar display will show the 1st day of the next month when returned to the normal time/calendar mode.
- Because the auto-calendar is used, no adjustment at the end of the month is needed.

This watch's Normal Mode digital time display (TME) is automatically coordinated with that of the Local Time Mode display. Thus, the time on Normal Mode is adjusted, the time in Local Time Mode will automatically adjust accordingly. (Month and Date do not change.)

\section*{2. Alarm Mode (ALM)}


\section*{a. Setting the alarm}

The alarm can be set by following the same procedure as that for the time/calendar adjustment. Select the (flashing) display to be adjusted by pressing the (A) button in the alarm mode, and set the time when the alarm sounds by using the (C) button. * If the time/calendar mode employs the 12 -hour system for the hours display, the alarm set time is also shown by the 12-hour system, so AM/PM should be needed.

\section*{b. Switching the alarm ON/OFF}

The alarm can be switched ON/OFF by pressing the (c) button in the alarm mode. The alarm will sound for 20 seconds. While the (c) button is depressed, the monitoring alarm sounds.

\section*{c. Stopping the alarm sound}

Press any button to stop the alarm sound.
3. Chronograph (Stopwatch) Mode (CHR)
 for operation
○ : Pmess once.

\section*{a. Using the chronograph}
- Press the (A) button to start and stop the chronograph. (Stop and start can be repeated any required number of times simply by pressing the (A) button during the chronograph mode.)
- When the © button is pressed during the chronograph measurement, the split time is displayed for 10 seconds, after which the running display continues.
-When the © button is pressed in the stop state, the chronograph mode is switched to the reset state.
- At 99 hours, 59 minutes, 59 seconds and 99/100 seconds, both chronograph display and split time display revert to zero (reset position).

\section*{b. How to use the split counter}

The split counter is used to count the number of starting operations of the chronograph and measurements of split time up to 99. The split counter counts up by one in the following cases.
1. The chronograph is started.
2. The split time display ( 10 sec .) is over.
3. The split time is made while a split time is displayed (for 10 sec .).
4. Chronograph Memory Mode (CHR MEMO) After switching to Chronograph Memory Mode, although up to 99 split times or lap times can be timed, only the times from 0 to 10 are stored in memory. After timing has been finished, these times can be retrieved from the memory.

\section*{Split time and lap time}

Split time: time elapsed from the starting point to an intermediate point.
Lap time: time elapsed in a particular section.

a. Switching to Chronograph Memory Mode

Press the (B) button for 2 seconds or more in chronograph mode (VHR) and a confirmation beep will sound. This verifies the switch to Chronograph Memory Mode.
To return to Chronograph Mode, press the (B) button again for about 2 seconds.


\section*{b. Using the chronograph memory}

The same procedure is used for both split and lap measurements.
1. Select either the split time measurement or the lap time measurement by pressing the (C) button.
2. Press the (A) button to start and stop the chronograph. (Stop and start can be repeated any required number of times simply by pressing the (A) button during the chronograph mode.)
3. When the © button is pressed during the chronograph measurement, the split or lap time is displayed for 10 seconds, after which the running display continues.
4. When the © button is pressed in the stop state, the chronograph mode is switched to the reset state.
- Measurement time range: Maximum 99 hours, 59 minutes, 59 seconds and 99/100 seconds.

\section*{C. Chrono-memo function}

Each time a series of start, stop and split time measurements or lap time measurements is performed in the chronograph mode, the memo number is increased by one.
The time measurement and the time when the measurement was finished are recorded as a chrono-memo. This memo can be recalled after the final measurement.

Note: Memo numbers 00 to 99 are available, a maximum of 11 memos can be recalled after the measurements.
d. How to call the memo

- To call the memo after the measurement is finished, press the (B) button while the watch is reset. At this time, the MEMO mark appears. Then, if the (A) or (C) button is pressed, the memo No., time when memo was made, and measured time are indicated in order.
If the \(\mathbb{A}\) button is pressed, the memos from memo No, 0 (time when the measured started) to memo No. 10 are indicated in order. If the (C) button is pressed, those memos are indicated in the reverse order.
- The stored memos can be indicated even while the watch is measuring. Call then through the same procedure as calling after the measurement is finished. Press the (B) button to set the watch in the memo-indicating mode. Then, press the (A) or (C) button to call the memos. If the (B) button is pressed, the watch returns to the measurement mode. If the split or lap measuring operation is performed, the measured split or lap is added to the previous record.
- If the memo No. 0 is called, the time when the measurement was started is indicated. The indication of A and P confirms to the 12 -hour/24hour system of "Time and Calendar Mode".

- When there is nothing stored in a memory number, the display at the left will appear. Only the memo number will appear.

\section*{e. Erasing values stored in memory}
1. To erase values stored in memory after they have been retrieved, press the (A) and (C) buttons simultaneously for about 2 seconds. There will be a confirmation beep. However, the beginning time (stored in Memory 0 ) will remain.
2. Changing to another mode from Chronograph Memory Mode (by pressing (B) button for 2 seconds), will erase all values stored in memory.
3. When the chronograph memory is activated after returning to the reset state, anything stored in memory previously will be lost.

In case of important data, be sure you understand the correct operation of this watch and how to recall the data from memory. Make a separate record of the data.

\section*{5. Timer Mode (TMR)}
a. Setting the Timer

Set the timer in the same manner as for the Time and Calendar display.
- Select the desired figures by pressing (AA) button.
- To set the timer, press © button.


Note: The timer can be set up to 23 hours 59 minutes 59 seconds 99/100 second.

\section*{b. Operating the Timer}

When time is up, there is a 5 -second alarm.
Afterward, the timer is reset to its initial setting.
1. Use the (A) button to start and stop the timer.
2. Press the (C) button in the timer stop mode, to reset the timer.
3. Press © button while the timer counting down to return the timer set and restart.
- The Timer Mode can be changed to another mode while the timer is running.
Note: Entering either Pace Timer Mode or CHronograph Memory Mode will cause the timer to stop running and return to its initial setting.

\section*{6. Pace Timer Mode (PACE TMR)}

The pace timer can be used to set a certain pace for a certain period of time. The pace timer will continue to switch from pace timer 1 to 2 alternately and automatically until stopped.
For example, the pace timers can be set so that they will automatically switch from a pace of 60 beats per minute for 5 minutes (pace timer 1) to a pace of 100 beats per minute for 3 minutes (pace timer 2). This is useful to keep a regular pace while biking, running, etc.
This function is especially suitable for bikers, also it can be used for training and competing in all kinds of sports, at track meets, etc.


\section*{a. How to set the pace timer}

1. Switch to Pace Timer Mode (PACE TMR) from Timer Mode (TMR) by pressing the (B) button for about 2 seconds.
2. To set pace timer 1 and 2.

Select a segment (hour, minute, second) to be adjusted and set it with the (C) button.
- The pace range for both pace timer 1 and 2 is 60-180 beats per minute.
- The time limit for the pace timer is 23 hours 59 minutes 59 seconds.
- Press (C) button to switch from pace timer 1 to 2 and back, when at the initial setting mode.
- To conserve the battery, the pace timer pulse automatically shuts off after 15 minutes if:
- The pace timer is set for a period over 15 minutes and the pace timer pulse mark is ON.
- More than 15 minutes have passed since switching from one pace timer to the other.
b. Using the pace timer


Common maks for operation : Preas onot.
Fashes.
1. Set the two Pace Timers.
2. Once the pace timers have been set, it is possible to switch from pace timer 1 to pace timer 2 by pressing © button.
3. Press the (B) button to turn on/off the pace timer pulse sound. When the pulse is activated, PACE appears in the pace display area.
4. After setting the timers, the pace timer can be started by pressing (A) button.
5. When pace timer 1 reaches zero, as the time up signal is sounding the watch automatically switches to pace timer 2 and begins timing.
6. When time is up for pace timer 2 , the watch automatically switches back to pace timer 1 and starts timing as the time-up signal is sounding.

\section*{Notes:}
- Pulse ON/OFF: When the pace timers have been set, or when they are running, the pulse can be switched on or off by pressing (B) button.
- To return to pace timers initial setting position, press the (A) button to stop the pace timer, then press the (C) button.
- If one of the pace timers has not been set (i.e., it reads " 0 ") then instead of switching to it, the watch will reset the timer that has run out and restart the countdown.
- Pace timer 2 reads " 0 ", so the pace timer cannot switch from 1 to 2 . Therefore, it resets pace timer 1 and starts counting down again.
- Since pace timer 2 reads \(0: 0^{\prime} 00^{\prime \prime}\) it is impossible to start the pace timing from pace timer 2.

\section*{7. Local Time Mode (L-TM)}

Local Time Mode displays the local time in another time zone.

\section*{a. Setting local time}

The local time can be set by following the same procedure as that for the time calendar adjustment.


Comman marks for operation
() Press for 2 secosds or mone. 1 Pross once.

\section*{Notes:}
- Only the hour and minute can be set in Local Time Mode. The month, date and day of the week remain the same as in the Time/Calendar Mode (TME).
- "Minute Set" can be done easily in 30 minute increments.

\section*{H. ALL RESET FUNCTION AND ALARM SOUND MONITOR}

\section*{1. All Reset Function}

After replacing the battery, or if an unusual display has appeared, perform the All Reset function as follows.
1. Pull the crown out.
2. Press the (A), (B) and (C) buttons simultaneously.
3. Release all three buttons. The digital displays will be lighted to their maximum extent.
4. Push the crown in. A confirmation beep will indicate that the All Reset function is complete. After that, set the time and calendar.

\section*{2. Alarm Sound Monitor}
1. Press the (B) button to access Alarm Mode (ALM).
2. Press the (C) button for 2 seconds or more and the alarm will sound. Release (C) button and the alarm will stop sounding

\section*{I. USING THE REGISTER RING BEZEL}
- The register-ring gives you a convenient way to calculate the elapsed time or remaining time.

\section*{<Calculating the elapsed time>}
- Align the minute hand with register-ring zero mark \((\mathbf{v})\). The elapsed minutes since the ring was set can now be easily calculated by comparing the positions of the zero mark and the minute hand.


\section*{Example:}
1. Current time is \(10: 10\).

Align the zero mark ( \(\mathbf{v}\) ) with the minute hand.
2. The watch is next checked at 10:40. To determine the elapsed time, read the number of the register-ring at the minute hand position. The elapsed time is 30 minutes (fig. 1).

\section*{<Calculating the remaining time>}
- Align the register-ring zero mark ( \(\mathbf{v}\) with the target time and use the ring's calibrations to calculate the remaining time.


\section*{Example:}
1. The target time is \(10: 25\). Set the register-ring zero mark ( \(\mathbf{v}\) ) to the 25 minute mark on dial.
2. If the current time is \(10: 10\), the remaining time is 15 minutes ( 60 minus 45) as calculated from the register-ring (fig. 2).
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Classification} & \multirow[b]{2}{*}{Specification} & \multicolumn{2}{|l|}{Indication} & \multicolumn{5}{|c|}{Water-related use} \\
\hline & & Dial & Case back & Washing face or getting wet in the rain, that iwhen splashed over it and no water pressure is appled to is.) & Swimming and general washing work (kichen work/car washing etc.) & Water sports and skin diving. (without air tank) & Scuba diving. (with air tank) & Pulling out the crown when the watch is wet. \\
\hline Non water resistance & Non & Non & Non & NO & NO & NO & NO & NO \\
\hline Water resistance for daly lite & 3 bar water resistant & Non & WATER RESIST (ANT) & OK & NO & NO & NO & NO \\
\hline \multirow[t]{2}{*}{Reinforced water resistance for daily life} & 5 bar water resistant & WATER RESISTANT WR***** & WATER RESIST (ANT) & OK & OK & NO & NO & NO \\
\hline & 10 bar/20 bar water resistant watch & WATER RESISTANT WR**/ \% \% bar & WATER RESIST (ANT) & OK & OK & OK & NO & NO \\
\hline \multicolumn{5}{|l|}{"WATER RESISTANT" may sometimes be abbreviated as "WATER RESIST"} & \multicolumn{2}{|l|}{*Always set the crown in the normal position.} & \multicolumn{2}{|l|}{\({ }^{\text {* Tighen screw lock scrown completely. }}\)} \\
\hline
\end{tabular}
- 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 of the inside of the watch, the glass covering the face may fog up.
If this fogging up is only temporary it poses no problem, however, if it persists over a long period of time you should discuss the matter with a sales person at the shop where you purchased the watch or at a Citizen Service Centre.

\section*{Temperature}

Avoid exposing the watch to direct sunlight or leaving it in extremely hot or cold locations for long periods 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.

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

\section*{Magnetic Fields}

This watch is antimagnetic up to 60 gauss and 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 temporarily be affected.

\section*{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.

\section*{Chemicals and Gases}

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

\section*{Keep Your Watch Clean}

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

\section*{Battery}
- The battery is a monitor battery that has been factory-installed. For this reason it may wear out after purchase before the specified battery life (about 2 years) has elapsed.
- Be sure to keep the battery out of reach of infants and small children. Should accidental ingestion occur, consult a doctor immediately.

\section*{K. SPECIFICATIONS}
\begin{tabular}{ll} 
Type: & \begin{tabular}{l} 
Combination (Analogue + \\
Digital) quartz watch \\
\(\pm 20 ~ s e c o n d s ~ p e r ~ m o n t h ~ a t ~\)
\end{tabular} \\
normal temperature \(\left(5^{\circ} \mathrm{C} \sim\right.\) \\
Accuracy: & \(\left.35^{\circ} \mathrm{C} / 41^{\circ} \mathrm{F} \sim 95^{\circ} \mathrm{F}\right)\)
\end{tabular}

Note: The battery longevity varies with the usage of the alarm, chronograph, EL panel and so on. If the chronograph is not being used, make sure to reset it (to \(00^{\prime} 00^{\prime \prime} 0\) ). The product specifications are subject to change without notice for the purpose of product improvement.```

