# CITIZEN QUARTZ <br> CHRONO MEMO 

Model No. JM8XXX Cal. No. C220

## - INSTRUCTION MANUAL

## CTZ-6756

## FEATURE

This watch is an analog and digital combination watch which is provided with unique colour graphics and other helpful functions convenient to use when touring by car or motorcycle.

NAMES OF PARTS


## SETTING THE ANALOG TIME

1. Wait until the second hand reaches the zero and then pull out the crown to position (1).
2. Turn the crown to set the correct time.
3. Push the crown to position ( 0 ) after setting the analog time.


The analog indication and digital display of the time settings can be adjusted separately, thus, the dual time feature can be used.

## USING THE DIGITAL SYSTEM

## MODE SWITCHING

This watch has four modes for the following functions: time/calendar, alarm, timer and chronograph.

*AUTO RETURN
If the watch is left in the alarm mode for 2 minutes without operating any buttons, it will automatically return to the time/calendar mode.

Each time the $\mathbb{M}$ button is pressed, the display is changed to another mode.

## ADJUSTING THE TIME/CALENDAR

## A. Adjustment of Seconds

1. When the (B) button is pressed for 2 seconds or more, the watch enters adjustment mode
 with the seconds flashing.
2. When the © $A$ button is pressed while the seconds are flashing, the seconds display is reset to" 00 ".

## B. Adjusting the Time/Calendar

1. Each time the (B) button is pressed during the adjustment mode (when the seconds are flashing), the flashing display changes sequentially. Press the (B) button the required number of times to

reach the display to be adjusted.
2. Press the © $A$ button for each digit adjustment. (Rapid advance can be made by depressing the (A) button.)

- 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 returns to the normal time display.
- Normal return: Pressing the (M) button in the time/calendar adjustment mode (while any display is flashing) causes the display to return to the normal time/calendar display.
- The calendar can be set from 1994 to 2099
- 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 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.


## USING THE ALARM



## 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 (B) button in the alarm mode and set the time when the alarm sounds by using the (A) 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 noted.


## B. Switching the Alarm ON/OFF

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

## C. Stopping the Alarm Sound

Press any button to stop the alarm sound.

## USING THE TIMER

The timer can be set in one minute increments up to 60 minutes.

Timer set time (minutes)


## A. Setting the Timer

By pressing the (B) button in the timer mode while the set time is flashing, the set time is decreased in one-minute increments. Press the (B) button repeatedly until the display shows the desired set time. (Rapid advance can be made by depressing the (B) button.)

## B. Using the Timer

1. By pressing the © $®$ button, the timer starts counting down from the set time.
2. When the © $A$ button is pressed during measurement, the timer will stop. When the (A) button is pressed in the stop state, the timer will resume countdown. If the (B) button is pressed in the stop state, the timer will be reset to the timer set time.
3. After the time measurement ends, the timer will be sounded for about 5 seconds. Then the timer will return to the timer set time.

## <Timer restart function>

Pressing the (B) button during measurement causes the timer to return to the timer set time and starts counting down again.

## USING CHRONOGRAPH (STOPWATCH)

## A. Chronograph Mode Display



This drawing shows the reset state in the chronograph mode.

## B. Using the Chronograph

For the chronograph, either split time measurement or lap time measurement can be used optionally. A maximum of 10 split or 10 lap times can be memorised. The time when each split or lap time measurement was finished can be recalled after all of the required measurements have been taken.

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 $\mathbb{M}$ button.
2. Press the © $\mathbb{A}$ 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 (B) 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 (B) button is pressed in the stop state, the chronograph mode is switched to the reset state.

Measurement time range: 0 hours 00 minutes 00 seconds 00 to 23 hours 59 minutes 59 seconds (24-hour system)

- A measurement over 24 hours is automatically stopped in the reset state



## 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


## C. Chrono-Memo Function

Each time a series of start, stop and split time measurement 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.

## Notes

- 00 to 99 memo numbers are available, but the number of memos that can be recalled after the measurements, is a maximum of 10 (No. 0-8 and the final stop data).
- The memos are erased at the start of the next chronograph use, or by the all reset operation, refer to the ALL RESET OPERATION section. If necessary, data should be recorded separately.


## D. Recalling the Chrono memos



The same procedure is used to recall split time memos and lap time memos.

1. Press the © ${ }^{B}$ button in the reset state during the chronograph mode (split time measurement chronograph or lap time measurement), then start memo display (memo No. O0) is activated. The chronograph start time ( $00^{\prime} 000^{\prime \prime} 00$ ) and the operation time (current time when lap or split time is measured) are displayed alternately for 1.5 seconds each.

2. By pressing the (B) button repeatedly, memos No. 01 to No. 08 and the last stop memo can be recalled. (For any memo, the elapsed time and the time when the measurement has finished are displayed alternately for 1.5 seconds each)
3. When the (B) button is pressed after the last stop memo is called, the display returns to the reset state. (By pressing the (B) button for 2 seconds or more with a memo recalled, the display also returns to the reset state.)
(Notes)

- If the number of memos including the start memo is over 10 only memos No. 00 (start memo) to No. 08 and the last stop memo can be recalled. Memos No. 09 and subsequent memos cannot be recalled.


## E. Split Time/Lap Time Conversion Function

After the split time measurement is completed, when the memo is recalled in the lap time measurement chronograph mode, the split time will be converted to the appropriate lap time.
The conversion from lap time to split time can be performed in the same manner.

## ALL RESET OPERATION

After replacement of the battery or in case of incorrect display and operation (for example, the display is turned off or the alarm continues to sound) as a result of the watch being subject to a strong impact, perform the ALL RESET OPERATION as follows:

1. Pull the crown out to position (1).
2. Press the © $\mathbb{A}$, (B) and © ${ }^{(M)}$ buttons simultaneously. (When these buttons are depressed, the display is turned off.)
3. Release the buttons. (Display of all parts is turned on.)
4. Press the crown back into place. (At the same time, the confirmation sounds for 2 seconds.) The ALL RESET OPERATION is finished.
5. Then set the time correctly.

## USING THE CALCULATOR RING*

The following points should be considered while using the watch.

- Use the calculator as an approximate measurement device.
- The scale is not defined any particular unit of measure.


## Calculator

1) Elapsed-time calculations

Example: How long will it take a car travelling 80kph to go 400 kilometres?
Calculation: Align 80 on the outer scale with the speed index ( $\mathbf{(}$ ) mark on
 the inner scale. The position on the outer scale at 40 will now be lined up with 5:00 (5 hours) on the inner scale.
*Note that the calculator ring is not equipped on some models.

## 2) Speed calculations

Examples: If a car goes 180 km in 2 hours 30 minutes, how fast was the car travelling?
Calculation: Align 18 on the outer scale with 2:30
 on the inner scale. The Speed index ( $\mathbf{\Delta}$ ) mark will now be lined up with 72 (km/hr) on the outer scale.

## 3) Distance calculations

Example: How far will a car go if it travels at 60kph for 1 hour 20 minutes? Calculation: Align 60 on the outer scale with the speed index ( $\mathbf{(})$ mark on
 the inner scale. The position on the inner scale at 1:20 will now be lined up with $80(\mathrm{~km})$ on the outer scale.

## 4) Fuel consumption (litres/hr) calculations

Example: If a car travels 5 hours and uses 30 litres of fuel, how many litres of fuel per hour does the car use?
Calculation: Align 30 on

the outer scale with 5:00 on the inner scale. The speed index ( $\mathbf{\Delta}$ ) mark will now be lined up with 60 ( 6 litres/hr) on the outer scale.

## 5) Fuel consumption (litres) calculations

Example: How many litres of fuel does the car need to travel 5 hours if it uses 7 litres per hour?
Calculations: Align 70 on the outer scale with the
 speed index ( $\mathbf{(}$ ) mark on the inner scale. The position on the inner scale at 5:00 will now be lined up with 35 (litres) on the outer scale.

## 6) Travel (time) calculations

Example: If a car has 40 litres of fuel and burns it at a rate of 8 litres per hour, how many hours will the car be able to travel? Calculations: Align 80 on
 the outer scale with the speed index ( $\mathbf{\Delta}$ ) mark on the inner scale. The position on the outer scale at 40 will now be lined up with 5:00 (5 hours) on the inner scale.

## 7) Kilometre/mile conversions

- Use this feature to convert between kilometres and miles.
Example: One mile equals how many kilometres?
Calculations: Align STAT

( $\mathbf{A}$ ) (mile) on the inner scale with the 10 on the outer scale. At this position the km mark ( $\mathbf{\Lambda}$ ) will point to 1.6 on the outer scale.


## 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 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.

## 4. 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.
5. 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, benzine, paint, discolouration, deterioration or damage to the case, band and other components may occur.

## 6. 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 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 rash.
A watchband will easily become soiled with dust and perspiration because it is in direct contact with the skin. Even a stainless 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 are usually washed with a brush in mild, soapy water and well wiped 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.

## 7. Periodic inspection

Getting your watch checked once every year or two is recommended to ensure long use and troublefree operation.
8. Be sure to keep the batteries out of reach of infants and small children. Should accidental ingestion occur, consult a doctor at once.

## Water resistance

| Indication |  | Water-related use |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Watch face | Caseback | Light spray, perspiration, light rain, etc. | Swimming, etc. |  | Scuba diving (Diving with air tank) | Pulling out the crown when the watch is wet. |
| WATER RESISTANT (5 bar) | WATER RESIST | OK | OK | NO | NO | NO |
| WATER RESISTANT (10-20 bar) | WATER RESIST | OK | OK | OK | NO | NO |
| "WATER RESISTANT" may sometimes be abbreviated as "WATER RESIST". *Always set the crown in the normal position. *Tighten screwlock crown completely. |  |  |  |  |  |  |

## SPECIFICATIONS

1. Type: Combination (analog + digital) quartz watch
2. Time accuracy: Within +20 seconds per month
3. Operating temperature range: $0^{\circ} \mathrm{C}-55^{\circ} \mathrm{C}$ $\left(32^{\circ} \mathrm{F}-131^{\circ} \mathrm{F}\right)$
4. Display functions:

- Time/calendar
- Alarm
- Chronograph: 24-hour system
- Timer: Time setting range:60 minutes maximum

5. Power cell:

- Parts number: 280-44 (SR927W)
- Voltage: 1.55 V
- Lifetime: About 2 years
(Alarm sound...20sec./day)
(Timer sound... $5 \mathrm{sec} . /$ day)
- Specifications may be subject to change without notice as a result of improvements.

