# CITIZEN QUARTZ ALARM CHRONOGRAPH 

Model No. AI3XXX Cal. No. 6870

- INSTRUCTION MANUAL


## CTZ-B6813



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.

## 1. Name of Components

Refer to diagram of the watch when reading this section on components. The design may differ depending on the model.

| Name Mode | Time | Alarm 1 | Alarm 2 | Chronograph |
| :---: | :---: | :---: | :---: | :---: |
| 1: Mode hand | TME | AL-1 | AL-2 | CHR |
| 2: Function hand | Always stopped at the 0 position (12:00) |  |  | Chronograph minutes, 1/20th seconds |
| 3: Date | Always indicates the current date |  |  |  |
| 4: Hour hand | Hours | Alarm hour |  | Time hour display |
| 5: Minute hand | Minutes | Alarm minute |  | Time minute display |
| 6: Second hand | Seconds | ON/sec (OFF) | ON/OFF | Chronograph seconds |
| 7: 24H hand | Always displays 24-hour time in coordination with hour and minute hands |  |  |  |
| (M): Button (M) | Used during mode switching and when changing to correction state of each mode |  |  |  |
| (A): Button (A) | Seconds correction | Alarm monitor, alarm cancel | $\begin{aligned} & \text { Alarm monitor, } \\ & \text { alarm ON/OFF } \end{aligned}$ | Chronograph start' <br> stop <br> Rop |
| (B): Button (B) | Time correction in clockwise direction | Correction of in clockwise | alarm time irection | Reading in 1/20th second units |
| (C) Button (C) | Time correction in counterclockwise direction | Correction of counterclock | arm time in se direction | Chronograph splitreset |


| Mode | 0-Position Check | Timer | Local Time | Calendar |
| :---: | :---: | :---: | :---: | :---: |
| 1: Mode hand | -0, | TMR | L-TM | CAL |
| 2: Function hand | Stops at 0 position | Timer minutes | Stops at 0 position |  |
| 3: Date | Displays 1 (date) | Displays current date | Displays date of local time | Displays current date |
| 4: Hour hand | 0 (24) hours | Hours of current time | Hours of local time | Hours of current time |
| 5: Minute hand | 00 minutes | Minutes of current time | Minutes of local time | Minutes of current time |
| 6: Second hand | 00 seconds | Timer seconds | Seconds of local time | Displays current month |
| 7: 24H hand | Always displays 24-hour time in coordination with hour and minute hands |  |  |  |
| (M): Button (M) | Used during mode switching and when changing to correction state of each mode |  |  |  |
| (A): Button (A) | Correction of second hand | Timer start/stop |  | Correction of month in clockwise direction |
| (B): Button (B) | Correction of function hand | Correction of timer minutes in clockwise direction | Correction of time difference in clockwise direction | Date correction |
| (C): Button (C) | Correction of houf, minute and 24 H hands | Timer repeat, reset | $\begin{aligned} & \text { Correction of time } \\ & \text { difference in } \\ & \text { counterclockwise } \\ & \text { direction } \\ & \hline \end{aligned}$ |  |

## 2. Mode (Display Function) Switching

This watch is equipped with 8 modes consisting of time, alarm 1, alarm 2, chronograph, 0-position check, timer, local time and calendar modes. The mode changes each time the $\mathbb{M}$ button is pressed. The current mode can be confirmed with the mode hand.


| Display | Mode |
| :---: | :--- |
| TME | Current time |
| AL-1 | Alarm 1 |
| AL-2 | Alarm 2 |
| CHR | Chronograph |
| O4 | 0-Position Check |
| TMR | Timer |
| L-TM | Local Time |
| CAL | Calendar |

## 3. Before Using

Before using your watch, check that the functions of the watch operate properly by following procedure ( 0 -position check).

0 -Position: This refers to the base position of each hand that enables the watch to function properly.


1. Press button © $\mathbb{D}$ to switch the watch to the 0-position check mode [ $>0<$ ]. The hour hand, minute hand, 24 H hand, second hand, date and function hand will advance rapidly to the 0-position (base position).
Hour, minute and 24H hands .......... 00:00 (24:00)
Second hand 00 seconds
Date 1st
Function hand 0-position (12:00 position)

* Perform the "0-Position Correction" procedure when any hand is not at the 0 -position. If this 0 -position is not correct, the hands will not show the correct position (such as not returning to " 00 " when resetting the chronograph).
$A$ When one button (A), (B) or (C) is pressed while in the 0-position check mode, the hour, minute, second and function hands will move to the left and right following a demonstration program.


## <0-Position Correction Procedure>

1. Pull button $(\square)$ out while in the 0 -position check mode.
2. Press buttons (A), (B) or © to correct the 0-position of each hand.
The second hand can be corrected by pressing button (A).
The date and function hand can be corrected by pressing button (B).

* The date will be corrected by one day when the function hand completes 4 revolutions. The 12:00 position, immediately after the date has changed to " 1 ", is the 0 -position.
The hour, minute and 24 H hands can be corrected by pressing button (C).
Corrections can be made rapidly by holding down any of the buttons.

3. Push button $\mathbb{( 1 )}$ in to the normal position.

* After correcting the 0 -position of each hand, switch to each mode to reset the time, calendar, alarms and so forth.


## 4. Setting the Time [TME]

Press button $\mathbb{M}$ to switch to the time mode [TME].


1. Pull button © $\mathbb{A}$ out.
2. Press button (A) to reset seconds.
Simultaneous to pressing button ${ }^{(A}$, the second hand will return to the 0 seconds position and then start to move.
3. Press button (B) or © to correct the hour, minute and 24 H hands.
Corrections can be made one minute at a time in the clockwise direction each time button (B) is pressed.
Corrections can be made one minute at a time in the counterclockwise direction each time button (C) is pressed.

Corrections can be made rapidly by holding button (B) or (C) down.
Correct the time by moving the hands in the closest direction to the correct time.
4. Push in button $\mathbb{D}$ ) to the normal position.

[^0]5. Setting the Calendar [CAL]

Press button (M) to switch to the calendar mode [CAL]


1. Pull button (M) out.
2. Press button (A) to correct the month number. Correction can be made by advancing one month each time button (A) is pressed. The month number can be read directly from the normal hour positions.
(Example: 3:00 $\rightarrow$ March, 1:00 $\rightarrow$ January) Correction can be made rapidly by holding button (A) down.
3. Press button (B) to correct the date. Correction can be made by advancing one day each time button (B) is pressed. Correction can be made rapidly by holding button (B) down.
4. Push button $\mathbb{( 1 )}$ in to the normal position.

* Since the date and function hand are synchronised with each other, the function hand will turn at when correcting the date.
* Date correction at the end of each month is not required. However, since February is set at 28 days, date correction must be performed for February only in leap years.


## 6. Use of Quick Set Alarm [AL-1]

The quick set alarm function uses a 24 -hour clock. When the alarm set time is reached, an alarm sounds for 10 seconds. Once the alarm has stopped sounding, the alarm set time is cancelled automatically (alarm off). The alarm can be stopped by pressing any of buttons (A), (B) or © .

<Quick Set Alarm ON Display> Press button $\mathbb{\otimes}$ to switch to the alarm-1 [AL-1] mode.

- When the second hand is stopped at the ON position (23 second position), it indicates that the alarm is set (alarm ON). The hour, minute and 24 H hands indicate the alarm set time.
- When the second hand is moving, it indicates that the alarm has been cancelled (alarm OFF). The hour, minute and 24 H hands indicate the time of the TME mode.


## <Setting the Alarm Time>

Press button (B) or (C) to move the hour, minute and 24 H hands to the time at which the alarm is desired to be set.

- Correction can be made one minute at a time, in the clockwise direction, each time button (B) is pressed.
- Correction can be made one minute at a time, in the counterclockwise direction, each time button (c) is pressed.
Correction can be made rapidly by holding button (B) or (C) down.

Correct the alarm set time by moving the hands in the closest direction to the desired alarm time.

* When setting the alarm time, be careful that AM and PM are set correctly by referring to the 24 H hand.


## <Cancelling Alarm Set Time>

The alarm set time is cancelled by pressing button (A) when the alarm is ON .

## <Alarm Monitor>

The alarm sound can be monitored by pressing button (A) in the Alarm 1 mode when the alarm is OFF.

## 7. Use of Daily Alarm [AL-2]

The daily alarm also uses a 24 -hour clock. Once the alarm is set, the alarm sounds for 15 seconds at the alarm set time, once a day. The alarm sound can be stopped by pressing any of buttons $(\mathbb{A}$, (B) or (C).

## <Daily Alarm ON Display>



## <Setting the Alarm Time>

1. Pull button (M) out.

The second hand will indicate the ON position.
2. Press button (B) or (C) to move the hour, minute and 24 H hands to the time at which the alarm is desired to be set.

- Correction can be made one minute at a time, in the clockwise direction, each time button (B) is pressed.
- Correction can be made one minute at a time, in the counterclockwise direction, each time button (C) is pressed.

Correction can be made rapidly by holding button (B) or (C) down.
Correct the alarm set time by moving the hands in the closest direction to the desired alarm time.
3. Push button $\mathbb{M}$ ) in to the normal position.

* When setting the alarm time, be careful that AM and PM are set correctly by referring to the 24 H hand.


## <Switching Between Alarm ON and OFF>

The alarm will switch between ON and OFF each time button (A) is pressed with button (1M) pulled out.

## <Alarm Monitor>

The alarm sound can be monitored by pressing button (A) in the alarm 2 mode when button ( 1 ) is in the normal position.

## 8. Use of Chronograph [CHR]

The chronograph is able to measure time up to a maximum of 59 minutes, 59 and 19/20th seconds in 1/20th increments after which the chronograph returns to the chronograph reset display and stops. This chronograph is also able to measure split time. In the chronograph mode, the hour, minute and 24 H hand as well as date indicate the current time and date.


## <Explanation of Display>

Chronograph minutes: Read the function hand. Chronograph seconds: Read the second hand. Chronograph 1/20 seconds: The function hand will change to the $1 / 20$ th second display when button (B) is pressed during the stop or split display. The value for $1 / 20$ th seconds is read at every time.
<Use of Accumulated Elapsed Time Measurement>

1. The chronograph is started and stopped by pressing button (A). (Starting and stopping the chronograph can be repeated as many times as desired.)
2. The chronograph is started and stopped by pressing button (C) when it is stopped.
$\star$ A confirmation beep will sound when either the start, stop or split operation is selected.


## <Use of Split Time Measurement>

1. The chronograph is started and stopped by pressing button (A).
2. Pressing button (C) during measurement displays the split time for 10 seconds. The next split time is displayed when button (C) is pressed again during display of split time.
3. The chronograph is reset by pressing button (C) when it is stopped.

* The chronograph automatically returns to the measuring state

after displaying
the split time for 10 seconds.
$\star$ A confirmation beep tone will sound when either the start, stop or split operation is selected.
* Measurement will continue internally even when the watch is switched to a different mode during chronograph measurement. Measurement will be shown continuing when the watch is again returned to the chronograph mode. However, it returns to the reset display when 60 minutes have elapsed.


## 9. Use of Timer [TME]

The timer can be set over a range of 1 to 59 minutes in 1 minute increments. When measurement of the set time is completed, the watch beeps for 5 seconds indicating that the time is up. After the set time has elapsed, the timer will automatically return to the same set time. In the timer mode, the hour, minute and 24 H hands as well as the date indicate the current time and date.

<Timer Setting Procedure>
Press button (M) to switch to the timer mode [TMR].

1. Pull button (M) out.
2. Press button (B) or (C) to set the timer to the desired time. Correction can be made one minute at a time in the clockwise direction each time button (B) is pressed.
Correction can be made one minute at a time in the counterclockwise direction each time button (C) is pressed.
The hands can be advanced rapidly by holding button (B) or (C) down.
3. Push button $\mathbb{M}$ ) in to the normal position.

## <Measuring Procedure>

1. The timer is started and stopped by pressing button (A). When button (A) is pressed after the timer is stopped, timer measurement will continue from the time remaining on the timer when it was stopped.
2. Pressing button (c) when the timer is stopped, returns to the set time.


* When button (c) is pressed during timer measurement, the timer returns to the set time and restarts (timer flyback (restart) function).
A confirmation beep will sound when each of the timer start, stop, reset and repeat operations is selected.


## 10. Setting Local Time [L-TM]

The local time function enables the time in a different time zone to be set separately from the current time. Local time is set by performing a time difference correction on 1 hour units based on the current time (time of the TME mode). The minute and second hands move in coordination with the current time.

<Time Difference Correction> Press button (M) to switch to the local time mode [L-TM].

1. Press button (M) out. 2. Press button (B) or (C) to correct the time difference.

- Correction can be made one hour at a time in the clockwise direction each time button (B) is pressed.
- Correction can be made one hour at a time in the counterclockwise direction each time button (C) is pressed.
Correction can be made rapidly by holding button (B) or (C) down.

3. Push button $(\mathbb{M})$ in to the normal position.

* The range over which the time difference can be corrected is from +23 hours to -23 hours based on the current time (time of the TME mode).


## 11. What to do when the following occur [The hands do not indicate the correct positions in each mode]

- The hand base positions may shift after the watch has been subjected to a strong impact and so forth. When this happens, refer to [3. Before Using] and perform the " 0 -Position Correction" procedure.


## [The watch exhibits an abnormal display or operation]

- In extremely rare situations, the watch may exhibit an abnormal display or erroneous operation (such as the alarm continuing to sound, or the hands turning continuously) as a result of being subjected to the effects of static electricity or strong impact and so forth. When this happens, perform the "AllReset" procedure while reffering to the following page.


## [After Replacing the Battery]

- After the battery has been replaced, always make sure to perform the "All-Reset" procedure described previously. The watch may not run properly if this operation in not performed.


## [All-Reset Procedure]

The all-reset procedure can be

performed in any mode.

1. Pull button $\mathbb{M}$ out.
2. Simultaneously press button (A), (B) and (C). (The confirmation sounds at this time.)
3. Return button (M) to the normal position.

* After performing the all-reset procedure, always make sure to perform the " 0 -position correction" procedure while referring to [3. Before Using] before resetting the watch to the correct time.


## 12. Use of the Rotating Bezel

Some watches are not equipped with a bezel, depending on the model.

1. Tachymeter (non-rotating bezel type)
2. Directional (rotating bezel type)

## 1. Tachymeter



## If your watch is provided with a tachymeter:

The tachymeter is a feature that measures the speed of an automobile. Measuring how many seconds a car travels over a distance of 1 km enables the tachymeter scale to show the approximate average speed per hour during a journey (if this 1 km is covered within a maximum of 60 seconds.)
If the chronograph is started at the beginning of the distance measurement, and stopped after 1 km , the average speed per hour can be determined by the position of the chronograph second hand. If 1 km is covered in 45 seconds, the average speed will be about $80 \mathrm{~km} / \mathrm{h}$.

## 2. Directional rotating bezel

(Northern hemisphere)

## If your watch is provided

 with a compass bezel: The compass feature on this watch is based on the position of the sun. This compass should only be used as an approximate direction finder. Changes in laitude and the seasons may also cause directional misreadings.
One of the features of this watch is a directional rotating bezel for use in the Northern Hemisphere. By aligning the hour hand with the position of the sun in the sky, the point halfway between this position and 12 o'clock will be south. Align the " S " mark on the rotating bezel with this halfway point to determine all other points of the compass.

## 13. Precautions and Long Term Use

## 1. Water resistance

Check the chart to determine the water-resistant properties of this watch.

* Always set the crown in the normal position.

WATER RESISTANT may sometimes be abbreviated as WATER RESIST.


## 2. Avoid extreme temperatures

Avoid leaving your watch in extremely warm or cold locations for a long period of time.

## 3. Avoid strong shocks

4. Avoid strong magnetic fields
5. Avoid chemicals and corrosive gases

Avoid wearing this watch in the presence of chemicals and corrosive gases. If mercury or any chemical (such as fuel gasoline, thinner, alcohol, spray liquids of cosmetics or the like), makes contact with the watch, discolouration, deterioration or damage to the case, band or other components may occur.
6. Avoid static electricity

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

## 7. Keep the watch clean

It may become difficult to pull the crown out due to dirt and dust getting caught between the crown and the case when the watch is worn for long periods of time. To prevent this from happening, turn the crown freely back and forth occasionally while it is in the normal position. 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.
8. Periodic Inspection

Getting your watch checked once every two or three years is recommended to ensure long use and trouble-free operation.
9. Be sure to keep the battery away from infants or small children:
Should accidental ingestion occur, consult a doctor at once.

## 14. Specifications

1. Type: Multi-hand, analog quartz watch
2. Accuracy: Within $\pm 20$ seconds per month at normal temperatures $\left(5^{\circ} \mathrm{C}-35^{\circ} \mathrm{C} / 41^{\circ} \mathrm{F}-95^{\circ} \mathrm{F}\right)$
3. Operating Temperature Range: $-10^{\circ} \mathrm{C}$ to $+60^{\circ} \mathrm{C}$ ( $14^{\circ} \mathrm{F}$ to $140^{\circ} \mathrm{F}$ )
4. Functions:

- Time...............Hours, minutes, seconds, 24-hour clock
- Alarm..............Quick set alarm (alarm duration: approx. 10 seconds) Daily alarm (alarm duration: approx. 15 seconds)
- Chronograph. 60 minute measurement, $1 / 20$ th second increments, split time measurement function
- Timer............. 1 minute increments, can be set to a maximum of 59 minutes
- Local time .....Time difference correction in 1 hour units
- Calendar ........Month, date

5. Battery: 280-44 (SR927W)
6. Battery Life: Approx. 2 years This battery life is based on the following conditions of use.

- Alarm 1: 10 seconds/day
- Alarm 2: 15 seconds/day
- Chronograph measurement: 1 hour/day
- Timer measurement: 59 minutes/day
- Product specifications are subject to change without notice.


## Water Resistance

The water-resistant quality of our timepieces is offered in varying degrees depending on the model. This ranges from non-water resistant models to those suitable for SCUBA diving. Water resistance of our timepieces is measured in BAR or Barometric Pressure. Each BAR of pressure is equal to 14.5 pounds per square inch of pressure.

Water resistance is measured when the watch is at a static, or motionless state. As the watch is moved in water, such as from the motion of swimming, pressure is added from velocity. While you may be swimming in a pool at surface level, the watch may be experiencing forces equal to that of 100 feet of water pressure (3 BAR). Diving into a pool can cause forces on the watch to exceed those pressures. As such, you should always allow a margin of safety when exposing your watch to moisture. Never "push the limit" of the degree of water resistance of your timepiece.

A primary factor to keep in mind about water resistance is that periodic maintenance is needed to maintain original factory specifications for water resistance. When a watch is new, it meets specifications for water resistance as indicated on the case back. However, as the watch ages, the gaskets that seal the watch become dry and brittle, diminishing its water resistant quality. Exposure to environments such as chlorinated pools, salt water or soaps from showering can accelerate drying of the gaskets. We recommend that the gaskets be changed at least every 18 to 24 months to maintain the water resistant quality of your timepiece. If the watch is frequently exposed to chlorinated pools, soaps salt water, etc., we recommend that the gaskets be changed on a yearly basis.

From time to time, you may notice condensation that appears then goes away after a short period of time. This is a normal occurrence and happens primarily from sudden temperature changes. When there are sudden temperature changes such as entering a cool building from the hot out of doors, or jumping into pool on a hot day the watch may fog. Conversely, if you go to the cold outdoors from a warm building, fogging may occur. As long as the fogging clears in a short period of time, there is no need for concern.

Be sure the crown is completely pushed in prior to any contact with moisture. If your model is equipped with a screw down crown, be sure it is properly seated against the case. Do not operate the crown or any push button when the watch is wet as this may allow the entrance of moisture. . If at anytime, you notice moisture in your timepiece that does not clear in a short period of time, you should send your timepiece as soon as possible to the nearest Authorized Service Center for inspection.

You can determine the level of water resistance of our watches from the markings on your case-back. Additionally, models that are water resistant to 100 or 200 meters have an indication on the dial as well. The case-backs and dials are normally marked as follows:

The case back has no indication of water resistance
This indicates the watch is a non water-resistant model and is not designed for contact with moisture at all. Caution should be exercised to avoid any contact with moisture, such as when washing your hands or from a rainstorm.

## "Water Resist"

This watch is designed to withstand water from accidental splashing, such as from washing your hands or rain. Any submersion into water may result in the entrance of moisture.
"Water Resist 10BAR" or "W.R. 10BAR", Dial marked "WR100"
This watch is designed to withstand water pressure up to 333 feet. This includes water exposure from accidental splashing and rain, but also from showering, swimming in a pool and snorkeling. Be sure to rinse the watch with fresh water after exposure to a chlorinated pool, salt water, soaps, etc. After rinsing with fresh water, be sure to dry the exterior with a soft cloth.
"Water Resist 20BAR" or "W.R. 20BAR", Dial marked "WR200"
This watch is designed to withstand water pressure up to 666 feet. This includes all exposure to water up to and including recreational SCUBA diving. Be sure to rinse the watch with fresh water after exposure to a chlorinated pool, salt water, soaps, etc. After rinsing with fresh water, be sure to dry the exterior with a soft cloth.

## Special Note about Jacuzzis and Hot Tubs

The various components used in the manufacture and assembly of your watch expand at various rates. This results in a loss of the sealing capabilities of gaskets, which may allow moisture to enter. In addition, heat from these sources can cause deformation of certain materials leading to mechanical failures. For these reasons, you should remove your watch before entering a hot tub or Jacuzzi.


[^0]:    * When setting the time, be careful that AM and PM are set correctly by referring to the 24 H hand.

