## CITIZEN QUARTZ NAVIHAWK

# Model No. JNOXXX Caliber No. C300

# INSTRUCTION MANUAL

# CTZ-D6758



This combination watch can display the time in 30 cities of the world with a simple operation. In addition to the time displayed in the analog section, the times in 30 cities can be displayed in analog and digital can easily be switched. This watch is a useful tool for various purposes, such as on the international business scene and when travelling.

## Names and Functions

Look at the watch diagram at the beginning of this instruction manual and refer to the location of the parts.

## Names of Parts:

- [1] Minute hand
- [2] Hour hand
- [3] UTC Time Indicator (Displays Coordinated Universal Time in hours and minutes)
- [4] Mode hand (Shows the mode selected with the M button)
- [5] 24-hour hand
- [6] Displays the name of the city for which the time is displayed in the digital section [7]
- [7] Displays the time or calendar
- [8] Displays the functions of the (A) button
- $\begin{bmatrix} 9 \end{bmatrix}$  Displays the functions of the  $\widetilde{M}$  button
- [ 10 ] Displays the functions of the B button
- [ 11 ] Displays the functions of the  $\overset{\frown}{\mathbb{C}}$  button

## **Main Functions**

1. Displaying the Time in 30 Cities of the World

## The Coordinated Universal Time (UTC) and the time in 30 cities of the world can easily be displayed.

## Operation:

Press the M button to move the mode hand to [TME]. The name of and time in a city will be displayed at [6] and [7] and change in sequence each time the A (UP) or C (DOWN) button is pressed.

• The time in the analog and digital section can be switched.

## Operation:

Press the M button to move the mode hand to either **[TME]** or **[CAL]**. Press the A and C buttons simultaneously to switch between the analog and digital section.

# 2. Displaying the Calendar in 30 Cities of the World

# The calendar in 30 cities of the world can easily be displayed.

## Operation:

Press the M button to move the mode hand to **[CAL]**. The name of and calendar for a city will be displayed in **[6]** and **[7]** and change in sequence each time the A (UP) or C (DOWN) button is pressed.

## 3. Three Alarms

The watch has three alarms, each with a different tone. Each alarm can be set for the time in any one of thirty cities. See "Using the Alarm" for details.

## 4. Chronograph

The time can be measured up to 23 hours, 59 minutes, 59 seconds and 99 hundredths of a second, displayed in increments as small as one-hundredth of a second (1/100 sec). See "Using the Chronograph" for details.

## 5. Timer

The countdown timer can be set from 1 to 60 minutes in increments of 1 minute. See "Using the Timer" for details.

## 6. Zone Setting

The time displayed can be programmed so that only the desired cities are displayed. Using the zone setting function allows you to display the desired time and calendar for a city more efficiently. See "Using the Zone Setting function" for details.

#### **Changing Modes**

The mode changes each time the M button is pressed. The current mode during operation can be confirmed with the mode hand [4].

The modes change in the following sequence:  $[TME] \Rightarrow [CAL] \Rightarrow [AL-1] \Rightarrow [AL-2] \Rightarrow [AL-3] \Rightarrow$  $[CHR] \Rightarrow [TMR] \Rightarrow [SET]$ 



# The Time Difference Between the Cities Indicated by this Watch and Greenwich Mean Time

City code	City	Time difference	City code	City	Time difference	City	City	Time difference
UTC	Coordinated Universal Time	±0						
LON	London	±0	DAC	Dacca	+6	ANC	Anchorage	-9
PAR	Paris	+1	вкк	Bangkok	+7	LAX	Los Angeles	-8
ROM	Rome	+1	SIN	Singapore	+8	DEN	Denver	-7
CAI	Cairo	+2	HKG	Hong Kong	+8	СНІ	Chicago	-6
IST	Istanbul	+2	PEK	Peking	+8	MEX	Mexico City	-6
MOW	Moscow	+3	TYO	Tokyo	+9	NYC	New York	-5
ĸwi	Kuwait	+3	SYD	Sydney	+10	YUL	Montreal	-5
DXB	Dubai	+4	NOU	Nouméa	+11	ccs	Caracas	-4
кні	Karachi	+5	AKL	Auckland	+12	RIO	Río de Janeiro	-3
DEL	New Delhi	+5,5	HNL	Honolulu	-10	BUE	Buenos Aires	-3





The time in the analog and digital sections can be easily switched.



## **Using the Zone Setting Function**

This page should be read with the watch diagram, on the first page of this manual, showing the location of the parts.

This watch can display the time in 30 cities of the world in sequence. Using the zone setting function allows you to skip the cities you do not wish displayed.



#### [ Preparation for zone setting ]

Press the M (MODE) button to move the mode hand to **[SET]**. (At this point, the cities to be displayed or to be skipped can be confirmed by using either the M [UP] or C [DOWN] button.)

## [Zone setting – Display/No Display]

- 1. Pull the M (MODE) button out to the setting position.
- 2. Use the  $\triangle$  (UP) button to select the cities.
- 4. Use the © (SET) button to select daylight-saving time ON or OFF.
- 5. Push the (MODE) button to its normal position. Zone setting is now completed.
- 6. Press the (MODE) button to return the mode hand to [TME].

#### Adjusting the Time

This page should be read with the watch diagram, on the first page of this manual, showing the location of the parts.

Adjusting the time for one of the 30 cities will automatically adjust the time for the remaining cities according to the time differences.

## [Preparation for time adjustment]



 Press either the A (UP) or C (DOWN) button to move to the desired city. The name of the city will <u>NYC</u>-city new

be displayed at [6].



## [Time adjustment]

- 1. Pull the M (MODE) button out to the setting position. The time is displayed in the digital section with the hours, minutes and seconds blinking. (At this point, daylight-saving time ON/OFF can be selected by pressing the (C) (SET) button.)
- 2. Press the (SELECT) button. The desired segment of hours, minutes or seconds will blink in sequence. The segments blink in the following sequence: [hours, minutes and seconds] - $[seconds] \Rightarrow [minutes] \Rightarrow [hours] \Rightarrow [switching]$ between 12- and 24-hour systems] → [hours, minutes and seconds].
- 3. Use the (C) (SET) button to adjust the blinking segment.
- 4. Push the (M) (MODE) button in to its normal position. Time adjustment is now completed.

## Adjusting the Calendar

This page should be read with the watch diagram, on the first page of this manual, showing the location of the parts.

#### Adjusting the calendar for one of the 30 cities will automatically adjust the calendar for the remaining cities, according to the time differences.



## [Preparation for calendar adjustment]

- 1. Press the M (MODE) button to move the mode hand to [CAL].
- 2. Press either the (A) (UP) button or © (DOWN) button NYC (New York) to select the desired city.

## [Calendar adjustment]

- 1. Pull the M (MODE) button out to the setting position. The day of the week (MO, TU, etc.) displayed in the digital section disappears and the month number starts blinking.
- 2. Press the (A) (SELECT) button. The desired segment of the date will blink in sequence. The segments in the following sequence:  $[month] \Rightarrow [date] \Rightarrow [year] \Rightarrow [month]$
- 3. Use the  $\bigcirc$  (SET) button to adjust the blinking segment.
- 4. Push the (MODE) button in to its normal position. Calendar adjustment is now completed. \*There is no need to adjust the day of the week since it is corrected automatically.

## Using the Alarm

This page should be read with the watch diagram, on the first page of this manual, showing the location of the parts.

The operation of Alarms 1[AL-1], 2[AL-2] and 3[AL-3] are the same; only their tones are different. Once an alarm is set, it sounds at the same time every day until it is cancelled (set to OFF).



[Preparation for alarm setting] /NYE-

Example: Setting AL-1

1. Press the (M) (MODE)

button to move the mode hand to [AL-1].

2. Press either the (A) (UP) or (C) (DOWN) button to select the desired city.

## [Alarm setting]



0:00

City name

.....

Example: NYC (New York)

- Press the (A) (SELECT) button. The desired segment of the time will blink in sequence. The segments blink in the following sequence:  $[Alarm ON/OFF] \Rightarrow [hours] \Rightarrow [minutes] \Rightarrow [alarm]$ ON/OFF1
- 3. Use the <sup>(C)</sup>(SET) button to adjust the blinking segment.
- 4. Push the M (MODE) button in to its normal position. Alarm adjustment is now completed.
- 5. Press the M (MODE) button to return the mode hand to [TME].
  - \* To turn the alarm off, press either the (A), (B), (C) or M button.

## Using the Chronograph

This page should be read with the watch diagram, on the first page of this manual, showing the location of the parts.

In addition to the normal function of measuring the time from a starting to a stopping point, this chronograph has a split time function that enables you to measure elapsed time at any point from start to finish.



[Preparation for using the chronograph] Press the (M) (MODE) button to move the mode hand to [CHR].

## [Using the chronograph - 1]

- 1. Pressing the (A) (START) button starts time measurement.
- Pressing the (A) (STOP) button stops time measurement.
- 3. Pressing the C (RESET) button returns the displayed numbers to zeros.

## [Using the chronograph - 2]

- 1. Pressing the (A) (START) button starts time measurement.
- 2. Pressing the © (SPLIT) button returns the elapsed time for 10 seconds. (This function is useful in measuring elapsed time upon passing a point during a marathon, etc.)
- 3. Pressing the  $\triangle$  (STOP) button stops the time measurement.
- 4. Pressing the © (RESET) button returns the displayed digits to zeros.



ПП

пп





## Using the Timer

This page should be read with the watch diagram, on the first page of this manual, showing the location of the parts.

#### The timer can be set from 1 to 60 minutes in increments of 1 minute.

#### Mode [TMR] \_\_\_\_

## [Preparation for using the timer]

- 1. Press the (M) (MODE) button to move the
  - mode hand to [TMR].
- 2. Pull the M (MODE) button out to the setting position.
- 3. Use the © (SET) button to set the time for the timer.
- 4. Push the M (MODE) button in to its normal
- position. Now timer setting is completed.

## [Using the timer - 1]

1. Pressing the (A) (START) button starts the countdown. (When the set time has expired (time up), the watch beeps (Example: Set for 12 min) for 5 seconds.)



3. Pressing the © (RESET) button resets the timer back to the set time.

## [Using the timer - 2]

- 1. Pressing the (M) (MODE) button starts the countdown.
- 2. Pressing the (C) button resets the timer back to the set time and restarts the countdown again. (This function is useful in restarting the countdown quickly.)
- 3. Pressing the (A) (STOP) button stops the countdown.
- 4. Pressing the © (RESET) button resets the timer back to the set time.



## **Convenient Functions**

This page should be read with the watch diagram, on the first page of this manual, showing the location of the parts.

#### ■ When the hands of the analog section cover the digital section, making the time in digital difficult to read, utilise the -Hand-retractor function:

Use this function to retract the hour and minute hands of the analog section to the 12 o'clock position. [Operation]

Hold the (B) button down for 2 seconds and then release it when "H.R" blinks in [10].

\*During Hand-Retractor mode the minute hand of the UTC time at [3] goes back and forth by 1 minute (-1 minute **∢ ▶** +1 minute), and "H.R" displayed at [10] blinks.

## [Cancelling Hand-Retractor mode]

Pressing the (B) button again cancels Hand-Retractor mode.

(H.R.: Abbreviation of Hand-Retractor)

#### When the watch displays something improperly and a malfunction is suspected, perform -

## ALL RESET and zero positioning:

When the watch displays something improperly and a malfunction is suspected, perform ALL RESET and zero positioning, then readjust the time, calendar and other modes.

## [ALL RESET]

12M

12 00

This function can be operated from any mode.

- 1. Pull the M (MODE) button out to the setting position.
- 2. Hold down the (A), (B) and (C) buttons simultaneously for more than 2 seconds then release them. (All digital segments will light up. Immediately reset to the zero position.)

## [Zero positioning]

- 1. Pressing the (B) button resets all segments in the digital section to zeros.
- 2. The digital display changes in the sequence of UTC  $\Rightarrow$  HR  $\Rightarrow$  MIN each time the (B) button is pressed.

UTC: For zero positioning of the UTC time display **HR**: For zero positioning of the hour hand and 24-hour hand

**MIN**: For zero positioning of the minute hand.

- 3. Pressing the (UP) button turns each hand clockwise. Pressing the C (DOWN) button turns each hand counterclockwise. Align all hands to the 12 o'clock position.
- 4. When the M (MODE) button is pushed in to its normal position, the watch beeps and at the same time the hands start moving. ALL RESET and zero positioning are now completed.
- 5. Set the time, calendar and other modes.

#### \*Zero positioning can also be done in Chronograph mode.

- 1. Press the (M) (MODE) button to align the mode hand to [CHR].
- The digital segments change in the sequence of UTC → HR → MIN each time the 
   B button is pressed.

**UTC**: For zero positioning of the UTC time display **HR**: For zero positioning of the hour hand and the 24-hour hand

- MIN: For zero positioning of the minute hand 4. Pressing the (A) (UP) button turns each hand clockwise. Pressing the (C) (DOWN) button turns each hand counterclockwise. Align all hands to the 12 o'clock position.
- 5. When the (A) (UP) button is pushed back in to this normal position, the watch beeps and at the same time the hands start moving. Zero positioning is now completed.
- 6. Set the time, calendar and other modes.

## Using the Register Ring

#### [Calculation function]

Note the following points when using this function. Use the calculation function of this watch only



as a guide. Scales like these cannot, place a decimal point for you.

#### A. Navigational calculation

#### 1. Time required

**Example**: Obtain the time required for the flight of an aircraft at 180 knots for 450 nautical miles. **Answer**: Align "18" on the outer scale with the SPEED INDEX (▲) on the inner scale. Then, "45" on the outer scale corresponds to "2:30" on the inner scale (time scale). Thus, the time required for the flight is 2 hours and 30 minutes.

#### 2. Knots (air speed)

**Example**: Obtain the knots (air speed) for 240 nautical miles with a flight time of 1 hour and 20 minutes.

**Answer**: Align "24" on the outer scale with "1:20" on the inner scale (time scale). Then, the SPEED INDEX ( $\blacktriangle$ ) on the inner scale corresponds to "18" on the outer scale. Thus, the air speed for the flight is 180 knots.

#### 3. Flight distance

**Example**: Obtain the air distance when the air speed is 210 knots and the flight time is 40 minutes. **Answer**: Align "21" on the outer scale with the SPEED INDEX ( $\blacktriangle$ ) on the inner scale. Thus, the air distance of the flight is 140 nautical miles.

## 4. Rate of fuel consumption

**Example**: Obtain the rate of fuel consumption (gallons/hour) when the flight time is 30 minutes and the fuel consumption is 120 gallons. **Answer**: Align "12" on the outer scale with the "30" on the inner scale. Then, the SPEED INDEX ( $\blacktriangle$ ) on the inner scale corresponds to "24" on the outer scale. Thus, the fuel consumption is 240 gallons per hour.

#### **5. Fuel Consumption**

Example: Obtain the fuel consumption required for a flight when the fuel consumption is 250 gallons per hour and the flight time is 6 hours. Answer: Align "25" on the outer scale with the SPEED INDEX (▲) on the inner scale. Then, "6:00" on the inner scale (time scale) corresponds to "15" on the outer scale. Thus, the fuel consumption is 1,500 gallons.

#### 6. Estimated flight time

Example: Obtain the estimated flight time when the fuel consumption is 220 gallons per hour and the aircraft has 550 gallons of fuel. Answer: Align "22" on the outer scale with the SPEED INDEX (▲) on the inner scale. Then, "55" on the outer scale corresponds to "2:30" on the inner scale (time scale). Thus, the estimated flight time is 2 hours and 30 minutes.

## 7. Differences in altitude

The difference in altitude can be obtained from the rate of descent and the descent time. **Example**: Obtain the difference in altitude when an aircraft continues descending for 23 minutes at a rate of 250 feet per minute. **Answer**: Align "25" on the outer scale with "10" on the inner scale. Then, "23" on the inner scale corresponds to "57.5" on the outer scale. Thus,

the difference in altitude is 5,750 feet.

## 8. Rate of climb (or descent)

The rate of climb (or descent) can be obtained from the time required to reach an altitude. **Example**: Obtain the rate of climb when an aircraft reaches an altitude of 7,500 feet after climbing for 16 minutes.

**Answer**: Align "75" on the outer scale with the "16" on the inner scale. Then, "10" on the inner scale corresponds to "47" on the outer scale. Thus, the rate of the climb is 470 feet.

#### 9. Time of climb (or descent)

The time required for climb can be obtained from the altitude to be reached and the rate of climb (or descent)

**Example**: Obtain the time of climb when an aircraft is to climb to 6,300 feet at a rate 550 feet per minute. **Answer**: Align "55" on the outer scale with "10" on the inner scale. Then, "63" on the outer scale corresponds to "11.5" on the inner scale. Thus, the time of climb is 11 minutes and 30 seconds.

## 10. Conversion

**Example**: Convert 30 statue miles into nautical miles and kilometres.

**Operation**: Align "30" on the outer scale with STAT ( $\blacktriangle$ ) on the inner scale. Then, NAUT ( $\bigstar$ ) on the inner scale corresponds to "29" nautical miles on the inner scale, and "12 km"(s) on the inner scale corresponds to "48.2" km on the outer scale.

#### **B. General Calculation Functions**

#### 1. Multiplication

#### Example: 20 x 15

**Answer**: Align the "20" on the outer scale with "10" on the inner scale. Then, "15" on the inner scale corresponds to "30" on the outer scale. Take into account the position of the decimal point and add one zero to obtain 300. Note that with the scales of this watch, the position of the decimal point cannot be obtained.

#### 2. Division

Example: 250 / 20

**Answer**: Align "25" on the outer scale with "20" on the inner scale. Then, "10" on the inner scale corresponds to "12.5" on the outer scale. Take into account the position of the decimal point to obtain 12.5.

#### 3. Proportion

**Example**: 30/20 = 60/x

**Operation**: Align "30" on the outer scale with "20" on the inner scale. Then, "60" on the outer scale corresponds to "40" on the inner scale. At this point, the proportion for every value on the inner and outer scales is 30:20.

#### 4. Square root

**Example**: Square root of 225

**Operation**: Turn the outer scale slowly and find a value that corresponds to both "22.5" on the outer scale and "10" on the inner scale. In this example, "22.5" on the outer scale corresponds to "15" on the outer scale. Thus, the answer is 15.

				Examples					
				Ĩ			A A A A A A A A A A A A A A A A A A A		
Name Specifi- Display			play	Temporary spray from washing	Kitchen work, swimming, car washing,	Skin diving (Diving without air	Scuba diving (Diving with		
Name	cations	Dial	Case	face,rain,etc.	yachting, water- skiing, etc.	tank)	air tank)		
Non-water- resistant				NO	NO	NO	NO		
Water-resistant for daily use	Water-resistant to 3 atmospheres	No indication	WATER RESIST(ANT)	ок	NO	NO	NO		
Reinforced water-	Water-resistant to 5 atmospheres	WATER RESIST	WATER RESIST(ANT)	ок	ОК	NO	NO		
resistance for daily use	Water-resistant to 10820 atmospheres	or no indication		ок	ок	ок	NO		

## To Keep Your Watch in Good Condition

## Water resistance

- \* To prevent water from coming into contact with the internal mechanism of the watch, never pull the crown out when the watch is wet.
- \* If your water-resistant watch is exposed to salt water or significant amounts of sweat, rinse it in clean water and dry thoroughly.

- \* Exposure to water will diminish the durability of most types of leather bands.
- \* The internal parts of the watch may hold some moisture. If the external temperature is lower than that inside the watch, the crystal may get fogged up. Temporary fogging does not pose a problem. If it persists for a prolonged period, we recommend that you have your watch checked by your authorised dealer or a Citizen Service Centre.

#### Temperature

Avoid exposing the watch to direct sunlight or leaving it in an extremely hot or cold location for prolonged periods.

- \* This will cause malfunctioning and shorten the life of the power cell.
- \* This may cause your watch to gain or lose time, and affect its other functions.

#### Shock

- \* This watch will withstand bumps and jars normally incurred in daily use or while playing non contact sports such as golf.
- \* Dropping the watch on a hard floor or otherwise applying shock to it may cause malfunction or damage.

#### **Magnetic Fields**

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

#### Static electricity

The integrated circuits used in the watch are sensitive to static electricity. If exposed to intense static electricity. the display may be adversely affected.

#### **Chemicals and Gases**

Avoid wearing the watch in the presence of strong chemicals or gases. If the watch comes in contact with 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 and band may become discoloured if they come in contact with mercury. such as from a broken thermometer.

#### Keep your watch clean

When the watch has been worn for a prolonged period, pulling the crown out may become difficult because of dirt and dust caught between the crown and the watchcase. To help prevent this from happening, rotate the crown back and forth occasionally while it is in the normal position. Wipe off any moisture that adheres to the case, crystal and band with a soft, clean cloth. Dirt left on the case or band may cause a skin rash. A watch band will easily become soiled with dust and perspiration, as it is in direct contact with the skin. Even a stainless steel or gold-plated band may begin to corrode if it has not been cleaned for a prolonged period. Mesh bands have very fine mesh. They will lose their "flexibility" if they are left soiled for a prolonged period.

A metal watchband should be cleaned periodically to keep it looking beautiful.

To clean your metal watchband, wash it with a brush in mild, soapy water, rinse and wipe thoroughly with a soft, absorbent cloth. Make sure that all water is removed. Take care to prevent any water from entering your watch during washing.

## Be sure to keep the power cells out of reach of infants and small children. Should accidental ingestion occur, consult a

doctor at once.

#### **Specifications**

#### Model:

CITIZEN Combination Watch "Navihawk" **Quartz oscillation frequency**: 32,768 Hz (Hz = Oscillations in 1 second) **Accuracy of time measurement** (under normal temperature range): <u>+</u> 20 seconds/month **Timepiece operation temperature range**: 0°C-55°C (32-131°F) **Functions**: Time (hours and minutes), Calendar (year, month, date and day of the week), Alarm modes (1, 2 and 3), Chronograph mode, Timer mode and Zone Setting mode

#### Power cell:

Power cell No. 280-44 (Power cell code: SR 927W) Life of power cell:

Approx. 3 years after installing a new power cell

Specifications subject to change without prior notice for product improvement.