

CITIZEN®

INSTRUCTION MANUAL



Eco-Drive®



ENGLISH

FRANÇAIS

ESPAÑOL

DEUTSCH

ITALIANO

PORTUGUÊS

中文(繁体字)

中文(简体字)

Thank you for your purchase of this Citizen watch.

Before using the watch, read this instruction manual carefully to ensure correct use.

After reading the manual, store it in a safe place for future reference.

Be sure to visit the Citizen website at <http://www.citizenwatch-global.com/> .

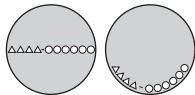
Here you will find a variety of information such as electronic setting guides, answers to frequently asked questions, Eco-Drive recharging information and more.

To check the movement number

A case number—4 alphanumeric characters and 6 or more alphanumeric characters—is engraved on the case back. (Figure on the right)

The first 4 characters of the case number represent the movement number of the watch. In the example on the right, “ $\triangle\triangle\triangle\triangle$ ” is the movement number.

Engraving position example






The engraving position may differ depending on watch model.



Safety precautions — IMPORTANT

This manual may contain certain safety advisories. Your watch should be used in accordance with these advisories at all times to ensure optimal enjoyment of your watch and to prevent injury to yourself, other persons and/or damage to property. Understand the meaning of the following symbols and read pages from **28** to **39**.

■ Safety advisories are categorized and depicted in this manual as follows:

 DANGER	Highly likely to cause death or serious injury
 WARNING	Can cause serious injury or death
 CAUTION	Can or will cause minor or moderate injury or damage

■ Important instructions are categorized and depicted in this manual as follows:
(Following symbols are examples of Pictograms.)

	Warning (caution) symbol followed by prohibited matters.
	Warning (caution) symbol followed by instructions that should be followed or precautions that should be observed.

Features

Water resistant construction capable of withstanding a depth of 1,000 m (water pressure equivalent to 100 atm)

- This watch features enhanced water resistance that enables it to withstand saturation diving using helium gas.

Equipped with a helium escape valve for discharging helium gas

- In saturation diving, when decompressing to surface pressure in a diver decompression chamber, the helium escape valve in the watch automatically discharges the helium gas that has seeped into the watch to improve safety.

Rotating bezel with reverse rotation prevention mechanism to prevent incorrect operation

- The rotating bezel, which is important for checking diving time, employs a reverse rotation prevention mechanism that prevents the rotating bezel from being rotated inadvertently.

Request to customers

All parts of this watch, except for the band, are to be repaired only at CITIZEN. This is because special technologies and equipment are required to perform repairs, inspections and adjustments. Please make requests for repairs to an authorized service center when having your watch repaired.

CONTENTS

Before using this watch	6
Band adjustment.....	7
Protective stickers.....	7
How to use a specially designed crown.....	8
Component identification.....	9
Helium escape valve	10
Charging your watch.....	11
When the watch reaches a low charge state (insufficient charge warning function)	12
Charging time by environment.....	13
Checking the current power reserve.....	14
Before diving	16
Cautions while diving	17

Maintenance after diving	18
Setting the time.....	20
Adjusting the calendar	21
Using the rotating bezel	22
Adjusting the length using the extension band	26
Troubleshooting.....	27
Eco-Drive watch handling precautions	28
Water resistance	30
Precautionary items and usage limitations	32
Specifications.....	40

Before using this watch

After unpacking, the following must be done before using the watch:

Check the power reserve indication. (→ page **14**)

Charge immediately if the power reserve level is “0” or “1”.



This watch has a rechargeable cell which is charged by exposing the dial to light.

Expose the dial to direct sunlight regularly to charge the watch.

For details of charging, see pages **11** to **15**.

Band adjustment

Do not adjust the length of the band (metal or rubber) yourself. If you fail to perform the work properly, the watch may fall off, or an injury may occur during adjustment.

For band adjustment, consult the shop where you purchased the watch or an authorized service center. Other shops may not be able to handle the watch, or may charge a fee.

Protective stickers

Be sure to remove any stickers covering the metal parts (back cover, band, clasp) or glass of the watch before use. Otherwise, perspiration or moisture may enter the gaps between the protective stickers and the parts, which may result in a skin rash and/or corrosion of the metal parts.



Before using this watch

How to use a specially designed crown

This watch is equipped with a specially designed crown to prevent accidental operation.

Screw down crown

Unlock the crown prior to operate your watch.

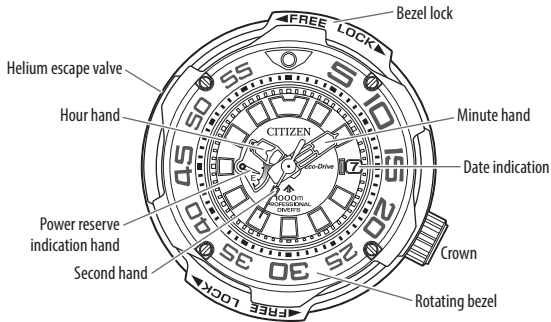
	Unlock	Lock
Screw down crown	 <p>Rotate the crown counterclockwise until it releases from the case.</p>	 <p>Push the crown in and rotate it clockwise until the orange warning color is no longer visible.</p>

- Depending on the model, the warning color may differ or there may be no warning color.

Note

- A screw down locking crown is employed to enhance the water resistance of the watch. When operating the crown, first rotate it counterclockwise to disengage the screw lock. Once you have finished operating the crown, always make sure to return the crown to the normal position and then rotate it clockwise while pushing it in so that the screw lock is securely engaged.

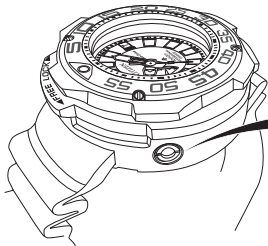
Component identification



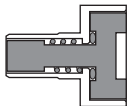
- The illustrations in this instruction manual may differ from the actual appearance of your watch.
- A solar cell is placed under the dial.

Helium escape valve

For professional saturation diving that uses helium, when decompressing to surface pressure in a diver decompression chamber the helium escape valve built into the watch automatically discharges the helium gas that has seeped into the watch. This prevents the watch from breaking.

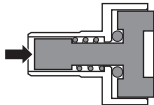


Valve cross section



When not
discharging

Inside the watch ↔ outside the watch



When
discharging

Charging your watch

This watch has a rechargeable cell which is charged by exposing the dial to light, such as direct sunlight or fluorescent lamps. After taking off the watch, put it in a location where the dial is exposed to bright light, such as by a window.



For optimal performance, be sure to:

- **Expose it to direct sunlight for 5 or 6 hours at least once a month.**
- **Avoid leaving it in dark places for long periods of time.**

Caution

- Do not charge the watch at high temperature (about 60°C (140°F) or higher).
- If the watch is obscured from light by long sleeves frequently, supplemental charging may be needed to ensure continual operation.

When the watch reaches a low charge state (insufficient charge warning function)

When the power reserve becomes low, the second hand moves once every two seconds. This is the insufficient charge warning function. Be sure to fully charge your watch.

- When the watch is sufficiently charged, the second hand will move normally.
- If you do not charge the watch for four days or longer after the insufficient charge warning movement has begun, the watch will be depleted of all power and stop.



Caution

- Even when the second hand moves once every two seconds, the current time and date are indicated.

Run time

From fully charged without extra charging: 1.5 years (at normal use)

Charging time by environment

Below are the approximate charging times when exposing to light continuously. Please use this table as a reference only.

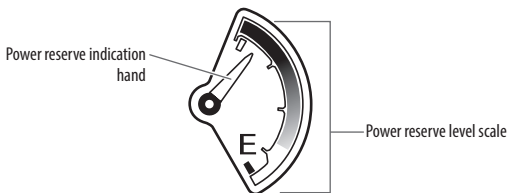
Environment	Illuminance (lx)	Charging time (approx.)		
		To work for one day	To start working normally when the cell is discharged	To become fully charged when the cell is discharged
Outdoors (sunny)	100,000	2 minutes	2 hours	35 hours
Outdoors (cloudy)	10,000	8 minutes	3.5 hours	90 hours
20 cm (8 inches) away from a fluorescent lamp (30 W)	3,000	30 minutes	8 hours	290 hours
Interior lighting	500	3 hours	50 hours	—

- **To charge your watch, it is recommended to expose the dial to direct sunlight.**





Optimal charging is achieved by exposing the dial to direct sunlight outdoors for a short time each day.

Checking the current power reserve

Power reserve level scale



Checking the current power reserve

Level	3	2	1	0
Power reserve level scale				
Duration (approx.)	540 – 450 days	450 – 280 days	280 – 10 days	10 days or shorter
Meaning	Power reserve is sufficient.	Power reserve is OK.	Power reserve is getting low.	Power reserve is insufficient. The insufficient charge warning will start soon.
	OK for normal use.		Charge immediately.	

- To ensure the maximum duration is available (approx. 540 days), charge the watch according to the times shown on page **13**.

Before diving

Always make sure to check the following items before diving.

- Is the time set correctly? (→ page **20**)
- Is the power reserve level "2" or more? (→ page **15**)
- Is the crown fully locked? (→ page **8**)
- Can the rotating bezel be operated correctly?
- Is the band securely attached?
- Is the band damaged?
- Are there any scratches, cracks or chips in the glass?
- Do you have the commercially available diving apparatus required?

Cautions while diving

- Never operate the crown while diving.
- Do not bump the watch against rocks or other hard objects.

Maintenance after diving

Be sure to check the following items to maintain the watch after diving.

Items to check after diving

- The watch is cleansed with fresh water immediately after use in water and water is wiped away with a dry soft cloth or something similar.
- No fog appears inside the watch's glass.
- No water entered the watch.
- The band of the watch is not worn or damaged.
- The crown is screwed down. (→ page **8**)
- The watch is fully recharged. (→ page **11**)

When cleansing the watch with fresh water

Cleanse the watch in a basin or something similar filled with fresh water.

- Do not expose the watch directly to water flowing from a water tap.
- Do not operate the crown or depress the buttons when the watch is wet.

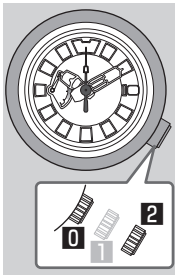
When fog appears inside the watch's glass or water enters the watch

If the inside of the watch fogs up for a long time or sea water enters it, put it in a box or plastic bag and immediately consult an authorized service center for repair.

- Otherwise, pressure inside the watch will increase and parts (crystal, crown, etc.) may come off.

Setting the time

Make sure that the watch is not wet before operating the crown.



1 Pull the crown out to position **2** as the second hand points to 0 seconds.

The watch stops and the power reserve indication hand moves to the reference position.

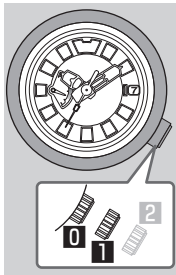
2 Rotate the crown to set the time.

- Pay attention to whether the time set is AM or PM.
- Date indication starts to change as the setting passes 10PM. Rotating the crown counter-clockwise does not turn back the date indication.

3 Push the crown in to position in **0** accordance with a reliable time source to finish the procedure.

Adjusting the calendar

Make sure that the watch is not wet before operating the crown.



You must correct the date on the first day of March, May, July, October and December.

- Do not set the date during the period below, when the date indication is changing on this watch. If you do, the date indication may change incorrectly.

Period of time: From 10PM to 0AM (12:00AM)

- 1 Pull the crown out to position 1.**
- 2 Rotate the crown clockwise to set the date.**
- 3 Push the crown in to position 0 to finish the procedure.**

Using the rotating bezel

You can see the elapsed time from a certain moment, or remaining time to a decided moment, easily by using the rotating bezel.

- Be sure to use a specialized instrument when diving. Use the watch only as a reference.
- The rotating bezel moves counter-clockwise only.

Bezel lock mechanism

The watch has a bezel lock mechanism that locks the rotating bezel in place. To move the rotating bezel, move the lock to **FREE** until it clicks.


When you have finished rotating the bezel, move the lock to the **LOCK** position until the orange warning color is no longer visible.




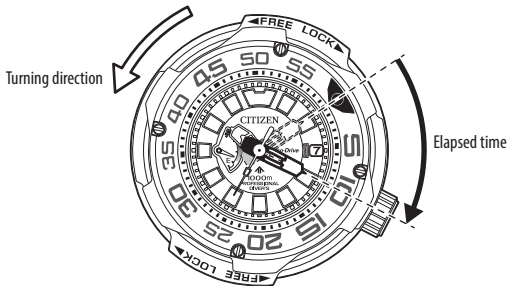
- Depending on the model, the warning color may differ or there may be no warning color.

Using the rotating bezel


Finding the elapsed time


Set the bezel lock to **FREE**, and rotate the rotating bezel until the  mark is in line with the minute hand. Then move the bezel lock to **LOCK**.

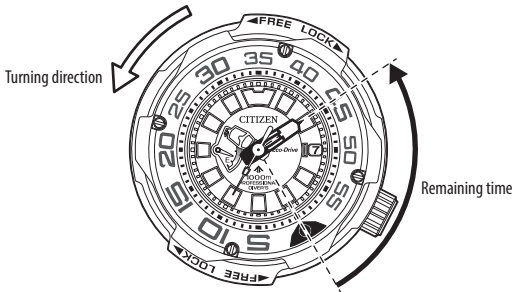
Use the markings on the rotating bezel between the  mark and the minute hand to find the elapsed time (within 60 minutes).



Finding the remaining time

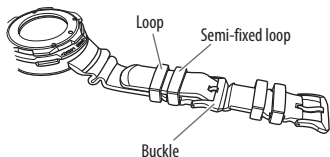
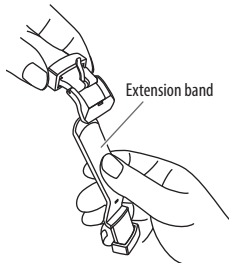
Set the bezel lock to **FREE**, and rotate the rotating bezel until the  mark is set to your desired time (within 60 minutes).

Use the markings on the rotating bezel between the  mark and the minute hand to find the remaining time.



Adjusting the length using the extension band

- The extension band is not supplied for some models.
- When wearing the watch over a wetsuit and so forth, and the length of the standard band is not long enough, attach the extension band provided to adjust the length of the band.



Note

- Securely attach the extension band by passing the end of the extension band through the buckle and sliding it through the loops.

Troubleshooting

If you have a problem with your watch, check the items below.

Symptom	Remedies	Page
---------	----------	------

The hands do not work properly.

The second hand moves once every two seconds.	Charge the watch.	12
The second hand does not move.	Push the crown in to position 0 .	—
	Charge the watch in direct sunlight for about 2 hours.	11
Cannot check the power reserve.	Push the crown in to position 0 .	—

The time and/or date is incorrect.

The time is incorrect.	Adjust the time.	20
Date indication is incorrect.	Adjust the calendar.	21

Eco-Drive watch handling precautions

<Always Make Sure to Recharge Frequently>

- For optimal performance, your watch should remain fully charged.
- Long sleeves may inhibit light transmission to your watch. This may result in your watch losing charge. In these cases supplemental charging may be necessary.
- When you take off the watch, place it in a bright location to ensure optimal performance.

CAUTION Recharging Precautions

- Do not charge the watch at a high temperature (about 60°C (140°F) or higher) as doing so may cause the movement to malfunction.

Examples:

- Charging the watch too close to a light source which generates a large amount of heat such as an incandescent lamp or halogen lamp.
 - * When charging under an incandescent lamp, be sure to leave 50 cm or more between the lamp and the watch to avoid exposing the watch to excessive heat.
- Charging the watch in a location where the temperature may become extremely high such as on the dashboard of a vehicle.



<Replacement of Rechargeable Cell>

- This watch utilizes a special rechargeable cell that does not require periodical replacement. However, power consumption may increase after using the watch for a number of years due to wear of internal components and deterioration of oils. This may cause stored power to be depleted at a faster rate. For optimal performance, we recommend having your watch inspected every 2-3 years for proper operation and condition check.

 WARNING Handling of Rechargeable Cell

- The rechargeable cell should never be removed from the watch. If for any reason it becomes necessary to remove the rechargeable cell from the watch, keep out of the reach of children to prevent accidental swallowing. If the rechargeable cell is accidentally swallowed, consult a doctor immediately.
- Do not dispose of the rechargeable cell with ordinary garbage. Please follow the instructions of your municipality regarding collection of batteries to prevent the risk of fire or environmental contamination.

 WARNING Use Only the Specified Battery

- Never use a battery other than the rechargeable cell specified for use in this watch. Although the watch structure is designed so that it will not operate when another type of battery is installed, if a conventional watch battery or other type of battery is installed in the watch and the watch is recharged, there is the risk of overcharging which may cause the battery to rupture. This can cause damage to the watch and injury to the wearer. When replacing the rechargeable cell, always make sure to use the designated rechargeable cell.


Water resistance

WARNING Water Resistance

- This watch is 1,000 m water-resistant. It can be used for saturation diving using helium gas.
- The packing used for this watch is a consumable part and will deteriorate over long-term use.

Deterioration may lead to water penetration, causing the watch to malfunction or stop.

Consult an authorized service center for inspection (for a charge) every 2 or 3 years, and replace the packing, glass or other parts as necessary.

Indication	Specification	 Minor exposure to water (washing face, rain, etc.)
Dial or Case back		
PROFESSIONAL DIVER'S 1000m	1,000 m water-resistant	OK

Water-related use



Swimming and
general washing
work

OK



Skin diving, marine
sports

OK



Scuba diving using
an air tank

OK



Saturation diving
using helium gas

OK



Operate the crown
or button when the
watch is wet

NO

Precautionary items and usage limitations

CAUTION To Avoid Injury

- Be particularly careful when wearing your watch while holding a small child, to avoid injury.
- Be particularly careful when engaged in strenuous exercise or work, to avoid injury to yourself and others.
- Do not wear your watch while in a sauna or other location where your watch may become excessively hot, since there is the risk of burns.
- Be careful when putting on and taking off your watch, since there is a risk of damaging your fingernails, depending on the manner in which the band is fastened.
- Take off your watch before going to bed.

CAUTION Precautions

- Always use the watch with the crown pushed in (normal position). If the crown is of the screw lock-type, make sure it is securely locked.
- Do not operate the crown or any push buttons when the watch is wet. Water may enter the watch causing damage to vital components.
- If water enters the watch or the watch fogs up and does not clear up even after a long time, consult your dealer or an authorized service center for inspection and/or repair.
- Even if your watch has a high level of water resistance, please be careful of the following.
 - If your watch is immersed in sea water, rinse thoroughly with fresh water and wipe with a dry cloth.
 - Do not pour water from a tap directly onto your watch.
 - Take off your watch before taking a bath.
- If seawater enters the watch, place the watch in a box or plastic bag and immediately take it in for repair. Otherwise, pressure inside the watch will increase, and parts (crystal, crown, etc.) may come off.



CAUTION When Wearing Your Watch

<Band>

- Leather bands and rubber (urethane) bands will deteriorate over time due to perspiration dirt. Because of the natural materials, leather band will be worn, deformed, and discolored over time. It is recommended to replace the band periodically.
- The durability of a leather band may be affected when wet (fading, peeling of adhesive), owing to the properties of the material. Moreover, wet leather may cause a rash.
- Do not stain a leather band with substances containing volatile materials, bleach, alcohol (including cosmetics). Discoloration and premature aging may be occurred. Ultraviolet light such as direct sunlight may cause discoloration or deformation.
- It is recommended to take off the watch if it gets wet, even if the watch itself is water-resistant.
- Do not wear the band too tightly. Try to leave enough space between the band and your skin to allow adequate ventilation.
- The rubber (urethane) band may be stained by dyes or soil present in or on clothing or other accessories. Since these stains may not be removable, caution is required when wearing your watch with items that tend to easily transfer color (articles of clothing, purses, etc.). In addition, the band may be deteriorated by solvents or moisture in the air. Replace with a new one when it has lost elasticity or become cracked.

- Please request adjustment or repair of the band in the following cases:
 - You notice an abnormality with the band due to corrosion.
 - The pin of the band is protruding.
- We recommend seeking the assistance of an experienced watch technician for sizing of your watch. If adjustment is not done correctly, the bracelet may unexpectedly become detached leading to loss of your watch or injury (excluding products containing the band adjustment tool).

Consult your dealer or an authorized service center to adjust the size. Other shops may charge for, or may not provide, the service.

<Temperature>

- The watch may stop or the function of the watch may be impaired in extremely high or low temperature. Do not use the watch in places where the temperature is outside the operating temperature range as stated in the specifications on page **40**.

<Magnetism>

- Analog quartz watches are powered by a step motor that uses a magnet. Subjecting the watch to strong magnetism from the outside can cause the motor to operate improperly and prevent the watch from keeping time accurately.

Do not allow the watch to come into close proximity to magnetic health devices (magnetic necklaces, magnetic elastic bands, etc.) or the magnets used in the latches of refrigerator doors, clasps used in handbags, the speaker of a cell phone, electromagnetic cooking devices and so on.

Precautionary items and usage limitations

<Strong Shock>

- Avoid dropping the watch or subjecting it to other strong impact. It may cause malfunctions and/or performance deterioration as well as damage to the case and bracelet.

<Static Electricity>

- The integrated circuits (IC) used in quartz watches are sensitive to static electricity. Please note the watch may operate erratically or not at all if exposed to intense static electricity.

<Chemicals, Corrosive Gasses and Mercury>

- Avoid using the watch in an environment where it may be exposed to chemicals or corrosive gases. If paint thinner, benzene or other solvents or products containing these solvents (including gasoline, nail-polish remover, cresol, bathroom cleaners and adhesives, water repellent, etc.) are allowed to come into contact with the watch, they may discolor, dissolve or crack the materials. Be careful when handling these chemicals. Contact with mercury such as that used in thermometers may also cause discoloration of the band and case.

<Protective Stickers>

- Be sure to remove any protective stickers that may be on your watch (case back, band, clasp, etc.). Otherwise, perspiration or moisture may enter the gaps between the protective stickers and the parts, which may result in a skin rash and/or corrosion of the metal parts.



CAUTION Always Keep Your Watch Clean

- Rotate the crown periodically so they do not become stuck due to accumulations of foreign matter.
- The case and band of the watch come into direct contact with the skin. Corrosion of the metal or accumulated foreign matter may result in black residue coming from the bracelet when exposed to moisture or perspiration. Be sure to keep your watch clean at all times.
- Be sure to periodically clean the bracelet and case of your watch to remove accumulated dirt and foreign matter. In rare circumstances, accumulated dirt, foreign matter may cause irritation with the skin. If you notice this, discontinue wearing the watch and consult your physician.
- Be sure to periodically clean foreign matter and accumulated materials from the metal band, synthetic rubber strap (polyurethane) and/or metal case using a soft brush and mild soap. Be careful not to allow moisture on the case if your watch is not water resistant.
- Leather bands may become discolored by perspiration or dirt. Always keep your leather band clean by wiping with a dry cloth.

Precautionary items and usage limitations

Caring for Your Watch

- Wipe any dirt or moisture such as perspiration from the case and crystal with a soft cloth.
- For metallic, plastic or synthetic rubber (polyurethane) band, clean it with soap and a soft toothbrush. Be sure to thoroughly rinse the band after cleaning to remove any soap residue.
- For a leather band, wipe off dirt using a dry cloth.
- If you will not be using your watch for an extended period of time, carefully wipe off any perspiration, dirt or moisture and store in a proper location, avoiding locations subject to excessively high or low temperatures and high humidity.

<When Luminous Paint is used for your watch>

The paint on the dial and hands helps you with reading the time in a dark place. The luminous paint stores light (daylight or artificial light) and glows in a dark place.

It is free from any radioactive substance or any other material harmful to a human body or environment.

- The light emission will appear bright at first and then diminish as time passes.
- The duration of the light (“glow”) will vary depending on the brightness, types of and distance from a light source, exposure time, and the amount of the paint.
- The paint may not glow and/or may dissipate quickly if exposure to light was not sufficient.

Specifications

Model	J210	Type	Analog solar-powered watch
Timekeeping accuracy	Average monthly accuracy: ± 15 seconds when worn at normal operation temperatures between $+5^{\circ}\text{C}$ (41°F) and $+35^{\circ}\text{C}$ (95°F)		
Operating temperature range	-10°C (14°F) to $+60^{\circ}\text{C}$ (140°F)		
Display functions	<ul style="list-style-type: none">• Time: Hours, minutes, seconds• Calendar: Date• Power reserve: 4 levels		
Maximum run time from full charge	<ul style="list-style-type: none">• After charged fully, the watch runs without additional charging: Approximately 1.5 years• Power reserve upon insufficient charge warning function: Approximately 4 days		
Battery	Rechargeable cell (lithium button cell), 1 pc.		

Additional functions	<ul style="list-style-type: none">• Solar power function• Power reserve indication (in four levels)• Overcharging prevention function• Insufficient charge warning function (two-second interval movement)
-----------------------------	---

Specifications and contents of this booklet are subject to change without prior notice.

CE

Model No.BN7 *
Cal.J210
CTZ-B8194