

# CITIZEN®

## INSTRUCTION MANUAL



***Eco-Drive.***

ENGLISH

DEUTSCH

FRANÇAIS

ESPAÑOL

ITALIANO

PORTUGUÊS

中文(繁体字)

中文(简体字)

CE

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.

Visit the Citizen website (<http://www.citizenwatch-global.com/>) to view visual guides for operation of your watch. Some models may be equipped with external features (calculation scale, tachymeter, etc.). Visual guides for operation of such external features can also be found on the website.

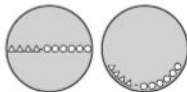
### To check the movement number

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, “△△△△” is the movement number.

### Engraving position example



The engraving position may differ depending on watch model.

## Safety precautions — IMPORTANT

This manual contains instructions that should be strictly followed at all times not only for optimal use, but to prevent any injuries to yourself, other persons or property. We encourage you to read the entire booklet (especially, pages 22 to 35) and understand the meaning of the following symbols:

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

|                                                                                                  |                                                      |
|--------------------------------------------------------------------------------------------------|------------------------------------------------------|
|  <b>DANGER</b>  | Highly likely to cause death or serious injury       |
|  <b>WARNING</b> | Can cause serious injury or death                    |
|  <b>CAUTION</b> | Can or will cause minor or moderate injury or damage |

- Important instructions are categorized and depicted in this manual as follows:

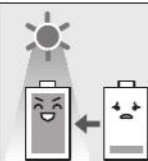
|                                                                                   |                                                                                                                   |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------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

## Before using this watch

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

- **Checking whether the second hand moves normally**

When the second hand moves once every two seconds, charge your watch. (see page 9)



**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 8 to 11.

## **Before using this watch**

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### **Band adjustment**

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. Consult your nearest authorized Citizen service center.

### **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.

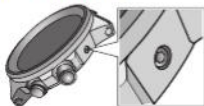
### **How to use a specially designed crown/button**

Some models are equipped with a specially designed crown and/or push button to prevent accidental operation.

**Screw down crown/button**

Unlock the crown/button prior to operate your watch.

|                               | Unlock                                                                                                                                                         | Lock                                                                                                                                                                                                                                           |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Screw down crown</b>       |  <p>Rotate the crown counterclockwise until it releases from the case.</p>    |  <p>Push the crown in to the case. With gentle pressure towards the case, rotate the crown clockwise to secure it to the case. Be sure to tighten firmly.</p> |
| <b>Screw down push button</b> |  <p>Rotate the locking screw counterclockwise, and loosen until it stops.</p> |  <p>Rotate the locking screw clockwise, and tighten firmly.</p>                                                                                               |

**Recessed buttons**

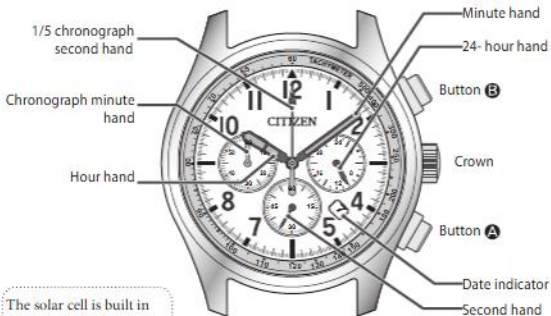
Press the button with a non-marring narrow-tipped object such as a wooden toothpick.

- Metal objects may cause marring or scratching of the button.

## Table of contents

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## Component identification



The solar cell is built in under the dial.

The illustrations in this instruction manual may differ from the actual appearance of your watch.

## 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 the watch to direct sunlight for five or six hours at least once a month.**
- **Avoid leaving the watch 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 eight 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. However, other features and functions of the watch will not be available for use.

## Charging your watch

### Charging time by environment

Below are the approximate times required for charging when exposing the watch dial 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               | 50 minutes                                            | 9 hours                                             |
| Outdoors (cloudy)                                   | 10,000           | 10 minutes              | 7 hours                                               | 60 hours                                            |
| 20 cm (8 inches) away from a fluorescent lamp (30W) | 3,000            | 35 minutes              | 25 hours                                              | 180 hours                                           |
| Interior lighting                                   | 500              | 3.5 hours               | 160 hours                                             | —                                                   |

- **To charge your watch, it is recommended to expose the dial to direct sunlight.**  
A fluorescent lamp or interior lighting does not have sufficient illumination to charge the rechargeable cell efficiently.

## **Run time**

From fully charged without extra charging: 9 months

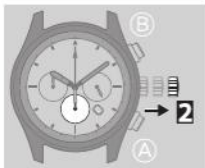
- As for the run time above, it is assumed that the chronograph be used for 60 minutes in a day.
- When you do not use the watch for a long time, it is recommended to pull the crown out to position **2** for saving the power.

### **About Quick Start function**

The watch works immediately when the charging starts, even though all the hands are stopped for lack of the power.

- Be sure to keep your watch fully charged when utilizing this feature.
- Adjust the time and calendar after fully charged. See page 12.

## Adjusting the time



### 1 Pull the crown out to position **2** when the second hand points to 0 second.

All the hands stop.

- When using chronograph, the chronograph is reset and 1/5 chronograph second hand returns to 0 second.



### 2 Rotate the crown to adjust the time.

- The 24-hour hand also moves. Pay particular attention to the hand to ensure AM or PM time is set properly.
- When the watch shows around 12:00 AM, the date indicator starts to change. The date indicator does not change by rotating the crown counterclockwise.

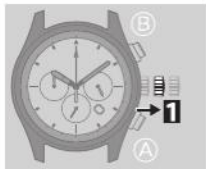


**3** Push the crown in to position **0** in accordance with a reliable time source to finish the procedure.

## Adjusting the calendar

Adjust the date indication on the first days of March, May, July, October and December.

- When the time on the watch is between 9:00 PM and 1:00 AM, do not execute the adjustment. Otherwise the date indication may change improperly.



**1 Pull the crown out to position 1.**



**2** Rotate the crown counterclockwise to adjust the date.



**3** Push the crown in to position **0** to finish the procedure.

## Using the chronograph

The 60-minute chronograph can indicate a maximum of 59' 59.8".

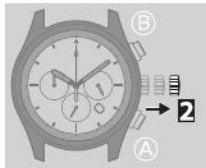
- After one hour of continuous chronograph operation, the chronograph automatically stops.
- The current time is shown while the chronograph works.
- While the second hand is moving once every two seconds (the insufficient charge warning function, see page 9), you can not use the chronograph.



## Using the chronograph

### Correcting the reference position of 1/5 chronograph second hand

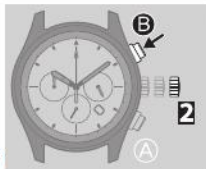
Do the following procedure when 1/5 chronograph second hand does not return to 0 second by resetting the chronograph.



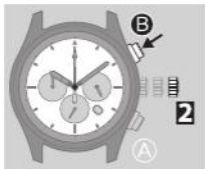
#### 1 Pull the crown out to position **2**

All the hands stop.

- Adjust the time and calendar after this procedure.



#### 2 Press and hold button **B** for two seconds.



**3 Adjust 1/5 chronograph hand to 0 second by pressing button **B** repeatedly.**

- Each time you press the button, 1/5 chronograph hand moves 1 step each.
- While you press and hold the button, the hand moves continuously.



**4 Push the crown in to position **0****

**5 Press button **A****

## Troubleshooting

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

| Symptoms | Remedies | Page |
|----------|----------|------|
|----------|----------|------|

### Movement of a hand seems strange

|                                               |                                                       |         |
|-----------------------------------------------|-------------------------------------------------------|---------|
| The second hand moves once every two seconds. | Fully charge the watch.                               | 8 to 11 |
| The second hand does not move.                | Push the crown in to position 0                       | 11      |
|                                               | Expose the watch to direct sunlight at least an hour. | 8 to 11 |

### The calendar is incorrect

|                                   |                      |    |
|-----------------------------------|----------------------|----|
| The date indication is incorrect. | Adjust the calendar. | 14 |
|-----------------------------------|----------------------|----|

| Symptoms                                                                | Remedies                                                                                                                            | Page           |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|----------------|
| <b>The chronograph is incorrect</b>                                     |                                                                                                                                     |                |
| Chronograph does not work.                                              | While the second hand is moving once every two seconds (the insufficient charge warning function), you can not use the chronograph. | <b>8 to 11</b> |
| Chronograph stops halfway.                                              | Reset the chronograph by pressing button <b>A</b> .                                                                                 | <b>17</b>      |
| 1/5 chronograph second hand does not return to 0 second when resetting. | Correct the reference position of 1/5 chronograph second hand.                                                                      | <b>18</b>      |

## **Eco-Drive (solar powered) 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 (20 inches) 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.



## Eco-Drive (solar-powered) watch handling precautions

### <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

- Refer to the watch dial and/or the case back for the indication of the water resistance of your watch. The following chart provides examples of use for reference to ensure that your watch is used properly. (The unit “1 bar” is roughly equal to 1 atmosphere.)
- WATER RESIST(ANT) ×× bar may also be indicated as W. R. ×× bar.

| Name                                        | Indication        | Specification                           |
|---------------------------------------------|-------------------|-----------------------------------------|
|                                             | Dial or Case back |                                         |
| Non-water resistant                         | —                 | Non-water resistant                     |
| Everyday-use water resistant watch          | WATER RESIST      | Water-resistant to 3 atmospheres        |
| Upgraded everyday use water-resistant watch | W. R. 5 bar       | Water-resistant to 5 atmospheres        |
|                                             | W. R. 10/20 bar   | Water-resistant to 10 or 20 atmospheres |

| Water-related use                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |
| Minor exposure to water (washing face, rain, etc.)                                | Swimming and general washing work                                                 | Skin diving, marine sports                                                        | Scuba diving using an air tank                                                     | Operate the crown or button when the watch is wet                                   |
| <b>NO</b>                                                                         | <b>NO</b>                                                                         | <b>NO</b>                                                                         | <b>NO</b>                                                                          | <b>NO</b>                                                                           |
| <b>OK</b>                                                                         | <b>NO</b>                                                                         | <b>NO</b>                                                                         | <b>NO</b>                                                                          | <b>NO</b>                                                                           |
| <b>OK</b>                                                                         | <b>OK</b>                                                                         | <b>NO</b>                                                                         | <b>NO</b>                                                                          | <b>NO</b>                                                                           |
| <b>OK</b>                                                                         | <b>OK</b>                                                                         | <b>OK</b>                                                                         | <b>NO</b>                                                                          | <b>NO</b>                                                                           |

## Water resistance

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- Non-water resistant models are not designed to come into contact with any moisture. Take care not to expose a watch with this rating to any type of moisture.
- Water resistance for daily use (to 3 atmospheres) means the watch is water resistant for occasional accidental splashing.
- Upgraded water-resistance for daily use (to 5 atmospheres) means that the watch may be worn while swimming, but is not to worn while skin diving.
- Upgraded water-resistance for daily use (to 10/20 atmospheres) means that the watch may be worn while skin diving, but not while scuba or saturated diving using helium gas.

## 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 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, push button, 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.

### **CAUTION** When Wearing Your Watch (continued)

- 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.  
Consult your nearest authorized service center.

#### <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.

#### <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.

### <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>

- 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 while it is pressed in fully and press the buttons 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.

## 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                                    | B620                                                                                                                                                                                                                                                      | Type | Analog solar-powered watch |
| Timekeeping accuracy (without reception) | Within $\pm 15$ seconds per month when worn at normal operation temperatures between $+5^{\circ}\text{C}$ ( $41^{\circ}\text{F}$ ) and $+35^{\circ}\text{C}$ ( $95^{\circ}\text{F}$ )                                                                     |      |                            |
| Operating temperature range              | $-10^{\circ}\text{C}$ ( $14^{\circ}\text{F}$ ) to $+60^{\circ}\text{C}$ ( $140^{\circ}\text{F}$ )                                                                                                                                                         |      |                            |
| Display functions                        | <ul style="list-style-type: none"> <li>Time: Hours, minutes, seconds, 24-hour</li> <li>Calendar: Date,</li> </ul>                                                                                                                                         |      |                            |
| Maximum run time from full charge        | <ul style="list-style-type: none"> <li>Fully charged to fully discharged:<br/>Approximately 9 months (when using the chronograph for an hour a day)</li> <li>Power reserve upon insufficient charge warning function:<br/>Approximately 8 days</li> </ul> |      |                            |
| Battery                                  | Rechargeable cell (lithium button cell), 1pc.                                                                                                                                                                                                             |      |                            |

|                             |                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Additional functions</b> | <ul style="list-style-type: none"><li>• Solar power function</li><li>• Overcharging prevention function</li><li>• Insufficient charge warning function (two-second interval movement)</li><li>• Quick Start function</li><li>• Chronograph (up to 60 minutes in 0.2-second increments)</li><li>• Correcting reference position function of 1/5 chronograph second hand</li></ul> |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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

Model No. CA4 \*  
Cal.B620  
CTZ-B8176