## Getting Acquainted

Congratulations upon your selection of this CASIO watch. To get the most out of your purchase, be sure to read this manual carefully and keep it on hand for later reference when necessary.

Expose the watch to bright light to charge its batteries before using it. You can use this watch even as its batteries are being charged by exposure to bright light.

- Be sure to read "Power Supply" of this manual for important information you need to know when exposing the watch to bright light.

If the digital dials of the watch are blank...
If the Power Saving indicator ( $\left.{ }^{(\text {s.ave }}\right)$ is flashing on the top dial, it means that the digital dials are blank because the watch's Power Saving function has turned them off to conserve power. Power Saving automatically turns off the digital dials and enters a sleep state whenever your watch watch is kept in the dark for a longer period the analog watch is kept in the dark for a longer period, the analog hands will also stop moving after a few days.

- The watch will recover from the sleep state if you move it to a well-lit area, if you press any button, or if you angle the watch towards your face for reading. - See "Power Saving Function" for more information. appears either as dark figures on a light background, o mode. Further details and technical information can be

(Light)
- Depending on the model of your watch, display text in this manual are shown using dark figures on a light in this manual
- Button operations are indicated using the letters shown in the illustration.
Each section of this manual provides you with the information you need to perform operations in each found in the "Reference" section.


General Guide


Timekeeping
Use the Timekeeping Mode to set and view the current time and date.
-When setting the time, you can also configure settings for the illumination duration, the 12/24-hour format, and power saving on/off.

- In the Timekeeping Mode, press (B) to cycle through the digital time screens as shown below.


Digital Time and Date
Make sure you select your Home City code before you change the current time and date settings. World Time Mode times are all displayed in accordance with the correct if you do not select the proper Home City code before setting the time and date in the Timekeeping Mode.

To set the digital time and date

3. When the setting you want to change is flashing, use (B) and/or (D) to change it as described below.

| Screen: | To do this: | Do this: |
| :---: | :---: | :---: |
| H'M' | Change the city code | Use (D) (east) and (B) (west). |
| 家\|'| | Toggle between Daylight Saving Time (il $)$ and Standard Time (WFF) | Press (D). |
|  | Toggle between 12-hour ( I FH ) and 24-hour ( E 4 H ) timekeeping | Press (D). |
| 35 | Reset the seconds to $\mathbf{0}$ [t | Press (D). |
|  | Toggle the illumination duration setting between 1.5 seconds ( $\%$ ) and 2.5 seconds ( $\left(\begin{array}{c}\text { w }\end{array}\right)$ | Press (B). |


| Screen: | To do this: | Do this: |
| :---: | :---: | :---: |
| 110:10 | Change the hour or minutes | Use (D) (+) and (B) (-). |
| (6.34) | Change the year Change the month or day |  |
| OW | Toggle Power Saving on (एम) and off ( CFF ) | Press (D). |

- See "City Code Table" for a complete list of available city codes. Illumination duration: Illumination
Power Saving: Power Saving Fu
- When you exit the setting screen, the analog hands are adjusted automatically to match the digital time. See "Analog Timekeeping" for more information.


## Daylight Saving Time (DST)

Daylight Saving Time (summer time) advances the digital time setting by one hour from Standard Time. Remember that not all countries or even local areas use Daylight Saving Time.

To change the Daylight Saving Time (summer time) setting

1. In the Timekeeping Mode, hold down (A) until the city code starts to flash in the
bottom dial, which indicates the setting screen.
2. Fress (C) once and the DST setting screen will appear in the bottom dial
3. Use (D) to toggle Daylight Saving Time (IH) and Standard Time (TFF).
4. Press ©A to exit the setting screen.

- The DST indicator ( ${ }_{\text {DST }}$ ) appears on the bottom dial to indicate that Daylight Saving Time is turned on.


## Analog Timekeeping

The analog time of this watch is synchronized with the digital time. The analog time setting is adjusted automatically whenever you change the digital time.
Note
The hands for the an
he following occurs.
When you change the digital time setting

- If the analog time dhe the Home City code and/or DST setting
describalog time does not match the digital time for any reason, use the procedure setting.
- Whenever sure you adjust the digital setting first
- Depending on how much the hands have to move in order to adjust to the digital time, it may take some time before they stop moving.

To adjust the analog time


1. In the Timekeeping Mode, press (C) five times to enter the Hand Setting Mode.
2. Hold down (A) until the current digital time starts to flash in the bottom dial, which indicates the setting screen 3. Use (D) and (B) to adjust the analog setting as described below.

## Operation Guide 3337

| When you want to do this: | Perform this button operation: |
| :--- | :--- |
| Move the hand setting <br> forward 20 seconds | - Press (D). |
| Move the hand setting a short <br> way forward at high speed | - Hold down (D). <br> - Release (D) when the hands reach the setting <br> you want. |
| Move the hand setting a long <br> way forward at high speed | - While holding down (D) to move the hands at <br> high speed, press (B) to lock the high-speed <br> hand movement. <br> - To stop the hand movement, press any <br> button. <br> - Hand movement stops automatically if the <br> hour hand makes one full (12-hour) revolution. |

4. Press (A) to exit the setting screen

- The minute hand will be adjusted slightly to match the seconds when you exit the setting screen
- To return to the Timekeeping Mode, press ©

World Time


To view the time in another city
While in the World Time Mode, press (D) to scroll through the city codes (time zones) to the east or (B) to scroll to the west

To toggle a city code time between Standard Time and Daylight Saving Time
 1. In the World Time Mode, use (B) and (D) to display the city code (time zone) whose Standard Time/Daylight Saving Time setting you want to change in the bottom dial.

- Pressing (A) in the World Time Mode causes the applicable city code to appear in the bottom dial fo about one second

2. Hold down (A) to toggle Daylight Saving Time (DST indicator displayed in the bottom dial) and Standard Time (DST indicator not displayed).
DST indicator
Note that you cannot use the World Time Mode to change the DST setting of the Home City code you currently have selected in the Timekeeping Mode. See "To change the Daylight Saving Time (summer time) setting" for information about turning the Home City code DST setting on and off.

- Note that you cannot switch between Standard Time and Daylight Saving Time while EVTT is selected as the city code.
- The DST indicator will appear whenever the bottom dial shows a city code for which Note that the DST/Standard Time
code Other city codes are not affected


## Alarms

 start to flash in the bottom dial, which indicates the setting screen

- This automatically turns on the alarm.

3. Press (C) to move the flashing between the hour and minute settings.
4. While a setting is flashing, use (D) $(+)$ and (B) $(-)$ to change it.

When setting the alarm time using the 12 -hour format, take care to set the time . correctly as a.m. (no indicator) or p.m. (קM indicator on the bottom dial).

## Alarm Operation

The alarm sounds in all modes at the preset time for about 10 seconds, or until you stop it by pressing any button.

To test the alarm
In the Alarm Mode, hold down (B) to sound the alarm

To turn an alarm and the Hourly Time Signal on and off

1. In the Alarm Mode, use (D) to select an alarm or the Hourly Time Signal
2. When the alarm or the Hourly Time Signal you want to set is selected, press (B) to turn it on and off. The current setting is indicated by top dial indicators. ALM Indicates alarm is ON
SIG Indicates Hourly Time Signal is ON.

- The alarm on indicator (ALM) and the Hourly Time Signal on indicator (SIG) are
displayed on the top dial in all modes while these functions are turned on
- If any alarm is on, the alarm on indicator is displayed on the top dial in all modes.

Countdown Timer

Graphic (1/10 second) | You can set the countdown timer within a range of one to |
| :--- |
| 60 minutes. An alarm sounds when the countdown |
| reaches zero. |
| - You can also select auto-repeat, which automatically |
| restarts the countdown from the original value you set |
| whenever zero is reached. |
| Whe left dial indicates the $1 / 10$ second count. When |
| auto-repeat is turned on, however, the center of this dial |
| shows the current repeat count. The periphery of the |
| dial continues to show the $1 / 10$ second count. |
| All of the operations in this section are performed in the |
| Countdown Timer Mode, which you enter by pressing |

Minutes Seconds
To set the countdown start time

1. While the countdown start time is displayed in the bottom dial in the Countdown Timer Mode, hold down (A) until the current countdown start time starts to flash, which indicates the setting screen.

- If the countdown start time is not displayed in the bottom dial, use the procedure under "To use the countdown timer" to display it.
shown below.


3. While a setting is flashing, use (D) (+) and (B) $(-)$ to change it.

- See "To turn auto-repeat on and off" below for details on the auto-repeat setting. 4. Press (A) to exit the setting screen.


## To use the countdown timer

Press (D) while in the Countdown Timer Mode to start the countdown timer.
When the end of the countdown is reached and auto-repeat is turned off, the alarm sounds for 10 seconds or until you stop it by pressing any button. The countdown
time is automatically reset to its starting value after the alarm stops.

- Press (D) while a countdown operation is in progress to pause it. Press (D) again to resume the countdown.
- To completely stop a countdown operation, first pause it (by pressing (D), and then press (B). This returns the countdown time to its starting value

To turn auto-repeat on and off


1. While the countdown start time is displayed in the
bottom dial in the Countdown Timer Mode, hold down (A) until the current countdown start time starts to flash in the bottom dial, which indicates the setting screen. 2. Press (C) until the auto-repeat setting is flashing in the bottom dial
2. Press (D) to turn auto-repeat on ( $\square$ displayed) and $\rightarrow$ displayed).
-When auto-repeat is turned on, the alarm sounds and countdown starts again whenever the countdown reaches zero. You can stop the countdown by pressing (D), and manually reset to the countdown start time by pressing (B).

- Auto-repeat timing repeats up to nine times.

Stopwatch


The stopwatch lets you measure elapsed time, split times,
and two finishes.

- The display range of the stopwatch is 99 minutes, 59.99 seconds.
- The stopwatch continues to run, restarting from zero after it reaches its limit, until you stop it.
- Exiting the Stopwatch Mode while a split time is frozen in the bottom dial clears the split time and returns to elapsed time measurement.
The stopwatch measurement operation continues even if you exit the Stopwatch Mode.
All of the operations in this section are performed in the Stopwatch Mode, which you enter by pressing (C)
To measure times with the stopwatch



## Operation Guide 3337

Auto light switch
indicator


An LED (light-emitting diode) and light guide panel illuminate the digital dials for easy reading in the dark. Th watch's auto light switch automatically illuminates the digital dials when you angle the watch towards your face The auto light switch must be turned on (indicated by the auto light swich indicaton" for to operate. information information.

## To turn on illumination manually

In any mode, press (L) to illuminate the digital dials. You can specify 1.5 seconds or 2.5 seconds as the illumination duration. See "To set the digital time and date" for more information.
the current operation turns on illumination regardless of the current auto light switch setting.
About the Auto Light Switch
Turning on the auto light switch causes illumination to turn on whenever you position your wrist as described below in any mode. Note that this watch features a "Full Auto level. It does not illuminate the digital dials under bright light.

Moving the watch to a position that is parallel to the ground and then tilting it towards you more than 40 degrees causes illumination to turn on.

- Wear the watch on the outside of your wrist.


Warning!

- Always make sure you are in a safe place whenever you are reading the watch using the auto light switch. Be especially careful when running or engaged in sudden illumination by the auto light switch does not surprise or distract others around you.
- When you are wearing the watch, make sure that its auto light switch is turned off before riding on a bicycle, or operating a motorcycle or any other motor vehicle. Sudden and unintended operation of the auto light switch can create a distraction, which can result in a traffic accident and serious personal injury.

To turn the auto light switch on and off
In any mode, hold down (L) for about two seconds to toggle the auto light switch on (auto light switch indicator displayed on the top dial) and off (auto light switch indicator not displayed).

- The auto light switch is automatically turned off whenever battery power is at Level 4. After battery power recovers to Level 2, you will have to perform the above procedure to turn the auto light switch back on again.
then on light switch is


## Power Supply

This watch is equipped with a solar cell and special rechargeable batteries (secondary batteries) that are charged by the electrical power produced by the solar cell. The illustration shown below shows how you should position the watch for charging.

Example: Orient the watch so its face is pointing at a light source. The illustration shows how to position a watch with a resin band. Note that charging efficiency drops blocked by clothing etc.
Normally, you should try to keep the watch outside of your sleeve as much as possible. Charging is significantly reduced if the face is only partially covered.


## Important!

- Storing the watch for long periods in an area where there is no light or wearing it in such a way that it is blocked from exposure to light can cause rechargeable battery power to run down. Make sure that the watch is normally exposed to bright light whenever possible.
- This watch uses special rechargeable batteries to store power produced by the solar cell, so regular battery replacement is not required. However, after very long use, experience problems getting the special rility to achieve a fuli charge. If you contact your dealer or CASIO distributor about having them replaced.
- Never try to remove or replace the watch's special batteries yourself. Use of the wrong type of batteries can damage the watch.
- All data stored in memory is deleted, and the current time and all other settings return to their initial factory defaults whenever battery power drops to Level 4 and if you should ever need to have the rechargeable batteries replaced.
- Turn on the watch's Power Saving function and keep it in an area normally exposed to bright light when storing it for long periods. This helps to keep the rechargeable batteries from going dead.


## Battery Power Indicator and Recover Indicator

 batteries.

- The flashing charge indicator ( ${ }^{\text {tha }}$ ) at Level 3 tells you that battery power is very low, and that exposure to bright light for charging is required as soon as possible.
- At Level 4, all functions are disabled and settings return to their initial factory defaults. Functions are enabled once again after the rechargeable batteries are charged, but you need to set the time and date, after the batteries reach Level 3 (indicated by the flashing charge indicator) from Level 4 . You will no be able indicator) after dropping to Level 4
Leaving the watch in direct sunlight
attery battery level. The correct momentarily show a reading that is higher than the actual
bater power indicator should appear after a few minutes.
- If you use the light or alarms a number of times during a short period, the recover recovers.

Beeper ton
Coordination between digital and analog timekeeping
After some time, battery power will recover and the recover indicator will disappear indicating that the above functions are enabled again

## Charging Precautions

Certain charging conditions can cause the watch to become very hot. Avoid leaving the watch in the areas described below whenever charging its rechargeable batteries Also note that allowing the watch to become very hot can cause its liquid crystal the watch returns to a lower temperature.

Warning!
Leaving the watch in bright light to charge its rechargeable batteries can cause it to become quite hot. Take care when handling the watch to avoid burn injury The watch can become particularly hot when exposed to the following
conditions for long periods.

- On the dashboard of a car parked in direct sunlight
- Under dire an incandescent lamp
direct sunlight
Charging Guide
After a full charge, timekeeping remains enabled for up to about 12 months. - The following table shows the amount of time the watch needs to be exposed to light each day in order to generate enough power for normal daily operations.

| Exposure Level (Brightness) | Approximate Exposure Time |
| :--- | :--- |
| Outdoor Sunlight (50,000 lux) | 4 minutes |
| Sunlight Through a Window (10,000 lux) | 19 minutes |
| Daylight Through a Window on a Cloudy Day <br> (5,000 lux) | 29 minutes |
| Indoor Fluorescent Lighting (500 lux) | 5 hours |

- Since these are the specs, we can include all the technical details.
- Display on 18 hours per day, sleep state 6 hours per day
- 1 illumination operation ( 1.5 seconds) per day
- 10 seconds of alarm operation per day
- Stable operation is promoted by frequent charging.

Recovery Times
The table below shows the amount exposure that is required to take the batteries from one level to the next.

| Exposure Level (Brightness) | Approximate Exposure Time |  |  |
| :---: | :---: | :---: | :---: |
|  | Level 4 | Level 2 | Level 1 |
| Outdoor Sunlight (50,000 lux) | 2 hours | 19 hours | 5 hours |
| Sunlight Through a Window (10,000 lux) | 7 hours | 94 hours | 22 hours |
| Daylight Through a Window on a Cloudy Day (5,000 lux) | 10 hours | 152 hours | 35 hours |
| Indoor Fluorescent Lighting ( 500 lux) | 109 hours | --- |  | (500 lux)

all for reference only. Actual required exposure
times depend on lighting conditions

## Reference

This section contains more detailed and technical information about watch operation. It also contains important precautions and notes about the various features and It also contains inath

## Power Saving Function

When turned on, the Power Saving function automatically


Power saving puts the watch into a sleep state whenever it is left for a shows how watch functions are affected by Power Saving

Elapsed Time in Dark
60 to 70 minutes
Functions

6 or 7 days

- LCD off
- LCD off

Alarm, hourly time signal, and analog timekeepin - LCD off, alarm and hourly time signal disabled - Analog timekeeping stopped at 12 o'clock

- Wearing the watch inside the sleeve of clothing can cause it to enter the sleep state. - The watch will not enter the sleep state between 6:00 AM and 10:59 PM. If the watch is already in the sleep state when 6:00 AM arrives, however, it will remain in the sleep state.

To recover from the sleep state
Perform any one of the following operations.
Perform any one of the following op

- Press any button.
- Angle the watch towards your face for reading


## Operation Guide 3337

To turn Power Saving on and off


On/Off status

1. In the Timekeeping Mode, hold down (A) until the city code starts to flash in the bottom dial, which indicate the setting screen. 2. Press (C) nine tim
screen appears.
2. Press (D) to toggle Power Saving on (D4) and off ( FF F ).
3. Press (A) to exit the setting screen.

- The Power Saving indicator (PSAVE) remains on the top dial in all modes while Power Saving is turned on.

Auto Return Features

- If you leave the watch in the Alarm or Hand Setting Mode for two or three minutes without performing any operation, it automatically returns to the Timekeeping Mode. - If you leave the watch with a flashing setting in a dial for two or three minutes


## Scrolling

The (B) and (D) buttons are used in various modes and setting screens to scroll through data. In most cases, holding down these buttons during a scroll operation scrolls through the data at high speed.

## Initial Screens

When you enter the World Time or Alarm Mode, the data you were viewing when you last exited the mode appears first.

## Timekeeping

- Resetting the seconds to 00 while the current count is in the range of 30 to 59 causes the minutes to be increased by 1 . In the range of 00 to 29 , the seconds are reset to 00 without changing the minutes
- The day of the week is automatically displayed in accordance with the date (year, month, and day) settings.
- The watch's built-in full automatic calendar makes allowances for different month lengths and leap years. Once you set the date, there should be no reason to change it except after you have the watch's batteries replaced or when battery power drops to Level 4.
- The current time for all city codes in the Timekeeping Mode and World Time Mode is calculated in accordance with the Greenwich Mean Time (GMT) differential for each city, based on your Home City time setting.
- GMT differential is calculated by this watch based on Universal Time Coordinated (UTC*) data.
UTC is the world-wide scientific standard of timekeeping. It is based upon carefully seconds are added or subtracted as necessary to keep UTC in sync with the Earth's rotation. The reference point for UTC is Greenwich, England.
12-hour/24-hour Timekeeping Formats
The 12-hour/24-hour timekeeping format you select in the Timekeeping Mode is also applied in all other modes
- With the 12 -hour format, the PM indicator ( PM) appears on the bottom dial for times in the range of noon to 11:59 p.m. and no indicator appears for times in the range of With the 24-hour form
ny indicator format, times are displayed in the range of $0: 00$ to $23: 59$, without any indicator.
Illumination Precautions
- Illumination may be hard to see when viewed under direct sunlight.
- Illumination automatically turns off whenever an alarm sounds

Auto light switch precautions

- The auto light switch is turned off automatically whenever battery power is at Level 3.
- Wearing the watch on the inside of your wrist, movement of your arm, or vibration of your arm can cause frequent activation of the auto light switch and illumination of whenever engaging in activities that might cause frequent illumination
- Note that wearing the watch under your sleeve while the auto light switch Note that we frequent illumination of the digital dials and can run switch is turned batteries.
More than 15 degrees too high

- Illumination may not turn on if the face of the watch is more than 15 degrees above or below parallel. Make sure that the back of your hand is parallel to the ground duration (see "To set the digital time and date"), even you keep the watch pointed towards your face. Static electricity or magnetic force can interfere with proper operation of the auto light switch. If illumination
does not turn on, try moving the watch back to the starting position (parallel with the ground) and then tilt it back towards you again. If this does not work, drop you arm all the way down so it hangs at your side, and then bring it back up again.
- Under certain conditions, illumination may not turn on until about one second afte you turn the face of the watch towards you. This does not necessarily indicate and
back and forth. This sound is caus sound coming from the watch when it is shaken switch, and does not indicate a problem with the watch.

City Code Table

| $\begin{gathered} \text { City } \\ \text { Code } \\ \hline \end{gathered}$ | City | $\begin{gathered} \text { GMT } \\ \text { Differential } \end{gathered}$ | Other major cities in same time zone |
| :---: | :---: | :---: | :---: |
|  |  | -11.0 | Pago Pago |
| HNL | Honolulu | -10.0 | Papeete |
| ANC | Anchorage | -09.0 | Nome |
| LAX | Los Angeles | -08.0 | San Francisco, Las Vegas, Vancouver, Seattle/Tacoma, Dawson City |
| DEN | Denver | -07.0 | EI Paso, Edmonton |
| CHI | Chicago | -06.0 | Houston, Dallas/Fort Worth, New Orleans, Mexico City, Winnipeg |
| NYC | New York | -05.0 | Montreal, Detroit, Miami, Boston, Panama City Havana Lima Bogota |
| CCS | Caracas | -04.0 | La Paz, Santiago, Port of Spain |
| RIO | Rio De Janeiro | -03.0 | Sao Paulo, Buenos Aires, Brasilia, Montevideo |
| --- | , | -02.0 |  |
|  |  | -01.0 | Praia |
| GMT |  |  | Dublin, Lisbon, Casablanca, Dakar, Abidjan |
| LON | London | +00.0 |  |
| PAR | Paris |  |  |
| BER | Berlin | +01.0 | Frankfurt, Vienna, Stockholm |
| $\begin{aligned} & \text { ATH } \\ & \text { CAI } \end{aligned}$ | Athens | +02.0 | Helsinki, Istanbul, Beirut, Damascus, Cape Town |
| JRS | Jerusalem |  |  |
| JED | Jeddah | +03.0 | Kuwait, Riyadh, Aden, Addis Ababa, Nairobi, Moscow |
| THR | Tehran | +03.5 | Shiraz |
| DXB | Dubai | +04.0 | Abu Dhabi, Muscat |
| KBL | Kabul | +04.5 |  |
| KHI | Karachi | +05.0 | Male |
| DEL | Delhi | +05.5 | Mumbai, Kolkata |
| DAC | Dhaka | +06.0 | Colombo |
| RGN | Yangon | +06.5 |  |
| BKK | Bangkok | +07.0 | Jakarta, Phnom Penh, Hanoi, Vientiane |
| HKG | Hong Kong | +08.0 | Singapore, Kuala Lumpur, Beijing, Taipei, Manila, Perth, Ulaanbaatar |
| SEL | Seoul |  | Pyongyang |
| TYO | Tokyo | +09.0 |  |
| ADL | Adelaide | +09.5 | Darwin |
| SYD | Sydney | +10.0 | Melbourne, Guam, Rabaul |
| NOU | Noumea | +11.0 | Port Vila |
| WLG | Wellington | +12.0 | Christchurch, Nadi, Nauru Island |

- Based on data as of December 2003

