

Operation Guide 2812

CASIO®

Getting Acquainted

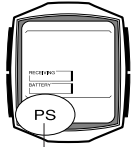
Congratulations upon your selection of this CASIO watch. To get the most out of your purchase, be sure to carefully read this manual and keep it on hand for later reference when necessary.

Expose the watch to bright light to charge its battery before using it.

You can use this watch even as its battery is being charged by exposure to bright light.

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

If the display of the watch is blank...



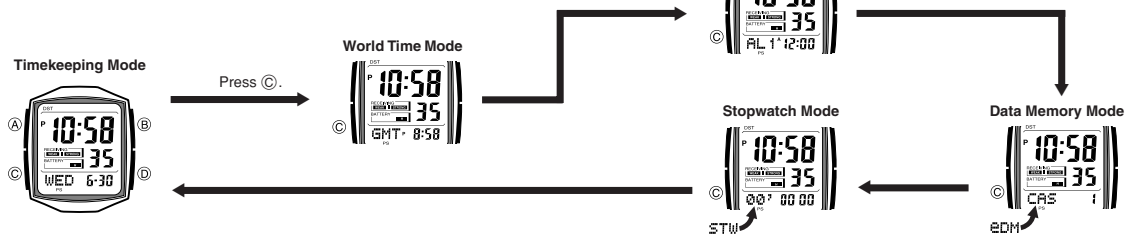
Power saving indicator

If the Power Saving indicator (PS) is on the display (either flashing or steady), it means that the display is blank because the watch's Power Saving function has turned it off to conserve power. Power Saving automatically turns off the display and enters a sleep state whenever your watch is left for a certain period in an area where it is dark.

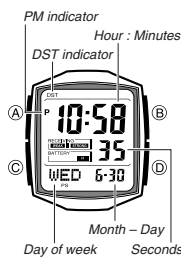
- The initial factory default setting is Power Saving on.
- The watch will recover from the sleep state if you move it to a well-lit area or if you press any button.
- See "Power Saving Function" for more information.

General Guide

- Press (C) to change from mode to mode.
- In any mode, press (B) to illuminate the display.



Radio-controlled Timekeeping



This watch receives a time calibration signal and updates its time setting accordingly. The time calibration signal includes both Standard Time and Daylight Saving Time (summer time) data.

- This watch is designed to pick up the time calibration signal transmitted from Mainflingen, Germany.

Current Time Setting

This watch automatically adjusts its time setting in accordance with a time calibration signal. You can also perform a manual procedure to set the time and date, when necessary.

- The first thing you should do after purchasing this watch is to set your Home City, which is the city where you will normally use the watch. For more information, see "To set your Home City" below.
- When using the watch in an area that is outside of the range of the transmitter in Mainflingen, you need to manually adjust the time as required. See "Timekeeping" for information about manual settings.

To set your Home City

- In the Timekeeping Mode, hold down (A) until the city code starts to flash, which indicates the setting screen.
- Use (D) (east) and (B) (west) to select the city code you want to use as your Home City.
 - The following are the city codes for major cities in the Western Europe time zones.
 LON: London
 PAR: Paris, Berlin, Milan, Rome, Amsterdam, Hamburg, Frankfurt, Vienna
 BER and EER: Paris, Berlin, Milan, Rome, Amsterdam, Hamburg, Frankfurt, Vienna
- Press (A) twice to exit the setting screen.

- The first press of (A) displays the 12/24-hour setting screen. Pressing (A) again exits the setting screen.
- Normally, your watch should show the correct time as soon as you select your Home City code. If it does not, it should adjust automatically after the next auto receive (in the middle of the night). You can also perform manual receive or you can set the time manually.
- If you are in an area that does not use Daylight Saving Time (summer time), turn off the DST setting.

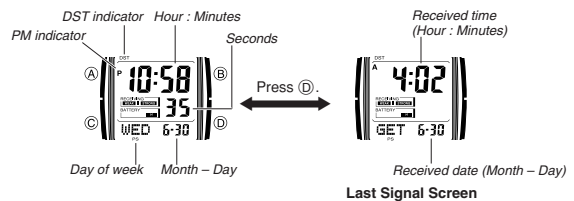
About This Manual



- 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 mode. Further details and technical information can be found in the "Reference" section.

To display the last signal screen

In the Timekeeping Mode, press (D) to display the last signal screen (indicated by GET). The last signal screen shows the date and time of the last successful time calibration signal reception.



Time Calibration Signal Reception

There are two different methods you can use to receive the time calibration signal: auto receive and manual receive.

• Auto Receive

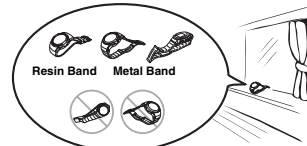
With auto receive, the watch automatically picks up the time calibration signal five times a day at 0:00 a.m., 1:00 a.m., 2:00 a.m., 3:00 a.m., and 4:00 a.m. For more information, see "About Auto Receive".

• Manual Receive

Manual receive lets you start time calibration signal reception with the press of a button. For more information, see "To perform manual receive".

Important!

- When getting ready to receive the time calibration signal, position the watch as shown in the nearby illustration, with its 12 o'clock side facing towards a window. Make sure there are no metal objects nearby.



- The watch should not be on its side or facing the wrong way.
- Proper signal reception can be difficult or even impossible under the conditions listed below.



- Signal reception is normally better at night than during the day.
- Time calibration signal reception takes from two to seven minutes. Take care that you do not perform any button operations or move the watch during this time.



- This watch is designed to receive the time calibration signal transmitted from Mainflingen, Germany. Signal reception is possible within the area represented by a circle with a radius of about 1,000 kilometers.
- At distances further than about 500 kilometers from a transmitter, signal reception may not be possible during certain times of year or times of day. Radio interference may also cause problems with reception.
- See the information under "Signal Reception Troubleshooting" if you experience problems with time calibration signal reception.

About Auto Receive

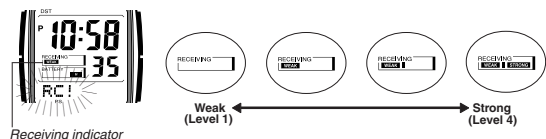
When auto receive is turned on, the watch automatically starts to receive the time calibration signal when the time in the Timekeeping Mode reaches 0:00 a.m., 1:00 a.m., 2:00 a.m., 3:00 a.m., and 4:00 a.m. each day (calibration times). The watch will also perform an additional auto receive at 5:00 a.m. if none of the regularly scheduled auto receive are successful.

Note

- Auto receive is performed only if the watch is in the Timekeeping Mode or World Time Mode when one of the calibration times is reached. It is not performed if a calibration time is reached while an alarm is sounding, or while you are configuring settings (while settings are flashing on the display).
- Auto receipt of the calibration signal is designed to be performed early in the morning, while you sleep (provided that the Timekeeping Mode time is set correctly). Before going to bed for the night, remove the watch from your wrist, and put it in a location where it can easily receive the signal.
- When auto receive is turned on, the watch receives the calibration signal for two to seven minutes everyday when the time in the Timekeeping Mode reaches each of the five calibration times. Do not perform any button operation within seven minutes before or after any of the five calibration times. Doing so can interfere with correct calibration.
- Remember that reception of the calibration signal depends on the time kept in the Timekeeping Mode. The reception will be performed whenever the display shows one of the five calibration times, regardless of whether or not the Timekeeping Mode time is actually the correct time.
- When two, three, four, or five receptions are successful, the watch uses the data of the last reception for calibration. When only one reception is successful, the watch uses the data of the successful reception.

About the Receiving Indicator

The receiving indicator shows the strength of the calibration signal being received. For best reception, be sure to keep the watch in a location where signal strength is strongest.



- Even in an area where signal strength is strong, it takes about 10 seconds for signal reception to stabilize enough for the receiving indicator to indicate signal strength.
- Use the receiving indicator as a guide for checking signal strength and for finding the best location for the watch during signal reception.
- The Level 4 receiving indicator remains on the display in all modes following reception of the time calibration signal and calibration of the watch's time setting. The Level 4 receiving indicator is not displayed if signal reception was unsuccessful or after manual adjustment of the current time setting.
- The Level 4 receiving indicator indicates that at least one of the five calibration signal reception was successful. Note, however, that the Level 4 receiving indicator is cleared from the display at 3:00 a.m. each day.

To perform manual receive

1. Place the watch on a stable surface so its top (12 o'clock side) is facing towards a window.
2. In the Timekeeping Mode, hold down (D) for about two seconds until the watch beeps.
3. Release (D) and RC! flashes to indicate that signal reception has started.

Receiving indicator

- Time calibration signal reception normally takes from two to seven minutes. Take care that you do not perform any button operations or move the watch during this time.
- After signal reception is complete, the display of the watch changes to the last signal screen.

Note

- To interrupt a reception and return to the Timekeeping Mode, press (D).
- If the reception is unsuccessful, the message ERR appears on the display for about one or two minutes. After that, the watch returns to the Timekeeping Mode.
- You can also change from the last signal or ERR screen to the normal timekeeping screen by pressing (D).

To turn auto receive on and off

1. In the Timekeeping Mode, hold down (A) until the city code starts to flash, which indicates the setting screen.
2. Press (C) twice to move the flashing to the auto receive on/off setting.
3. Press (D) to toggle auto receive on (On) and off (OFF).
 - If the current Home City setting is a city code that does not support auto receive, "-" appears in place of the on/off indicator. This means you cannot turn auto receive on or off.
4. Press (A) twice to exit the setting screen.
 - For information about city codes that support signal reception, see "To set your Home City".

Signal Reception Troubleshooting

Check the following points whenever you experience problems with signal reception.

Problem	Probable Cause	What you should do
Cannot perform manual receive.	<ul style="list-style-type: none"> • The watch is not in the Timekeeping Mode. • Your current Home City is not one of the following city codes: BER, PAR, or LON. 	<ul style="list-style-type: none"> • Enter the Timekeeping Mode and try again. • Select BER, PAR, or LON as your Home City.
Auto receive is turned on, but the Level 4 receiving indicator does not appear on the display.	<ul style="list-style-type: none"> • You changed the time setting manually. • The watch was not in the Timekeeping or World Time Mode, or you were performing some button operation during auto receive. • Even if reception is successful, the Level 4 receiving indicator disappears every day at 3 a.m. • Time data (hour, minutes, seconds) only was received during the last reception. The Level 4 receiving indicator appears only when time data and date data (year, month, day) are both received. 	<ul style="list-style-type: none"> • Perform manual receive or wait until the next auto receive is performed. • Check to make sure the watch is in a location where it can receive the signal.
Time setting is incorrect following signal reception.	<ul style="list-style-type: none"> • If the time is one hour off, the DST setting may be incorrect. • The Home City code setting is not correct for the area where you are using the watch. 	<ul style="list-style-type: none"> • Change the DST setting to Auto DST. • Select the correct Home City code.

- For further information, see "Important!" under "Time Calibration Signal Reception" and "Radio-controlled Timekeeping Precautions".

World Time

- World Time shows the current time in 30 cities (29 time zones) around the world.
- If the current time shown for a city is wrong, check your Home City time settings and make the necessary changes.
 - The watch will perform a signal reception even if it is in the World Time Mode when a calibration time is reached. If this happens, the World Time mode time settings will be adjusted in accordance with the Timekeeping Mode's Home City time.
 - All of the operations in this section are performed in the World Time Mode, which you enter by pressing (C).

To view the time in another city

- While in the World Time Mode, press (D) to scroll through the city codes (time zones).
- For full information on city codes, see the "City Code Table".

To toggle a city code time between Standard Time and Daylight Saving Time

1. In the World Time Mode, use (D) to display the city code (time zone) whose Standard Time/Daylight Saving Time setting you want to change.
 2. Hold down (A) to toggle Daylight Saving Time (DST displayed) and Standard Time (DST not displayed).
- Note that you cannot switch between Standard Time and Daylight Saving Time while GMT is selected as the city code.
 - The DST indicator will appear on the display whenever you display a city code for which Daylight Saving Time is turned on.
 - Note that the DST/Standard Time setting affects only the currently displayed city code. Other city codes are not affected.

Alarms

- You can set three independent Daily Alarms. When an alarm is turned on, the alarm tone sounds when the alarm time is reached. You can also turn on an Hourly Time Signal that causes the watch to beep twice every hour on the hour.
- The alarm number (AL1 through AL3) indicates an alarm screen. SIG appears in place of the alarm number when the Hourly Time Signal screen is shown.
 - All of the operations in this section are performed in the Alarm Mode, which you enter by pressing (C).

To set an alarm time

1. In the Alarm Mode, press (D) to select the alarm whose time you want to set.
-
2. Hold down (A) until the hour setting of the alarm time starts to flash, which indicates the setting screen.
 - This automatically turns on the alarm.

- Press (C) to move the flashing between the hour and minute settings.
- 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. (A indicator) or p.m. (P indicator).
- Press (A) to exit the setting screen.

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.

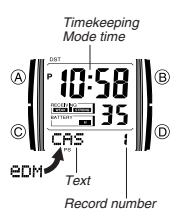
To test the alarm

In the Alarm Mode, hold down (D) to sound the alarm.

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

- In the Alarm Mode, press (D) to select an alarm or the Hourly Time Signal.
- When the alarm or the Hourly Time Signal you want to set is selected, press (A) to turn it on and off.

Data Memory



You can use the watch's data memory to store e-mail addresses, Web page URLs, and other text data.

- All of the operations in this section are performed in the Data Memory Mode, which you enter by pressing (C).

Data Memory Records

Each data memory record can contain up to 63 characters. Records are stored in memory in the sequence they are created.

- The number of records you can store in data memory depends on the number of characters that make up each record. See "Data Memory Management" for more information.

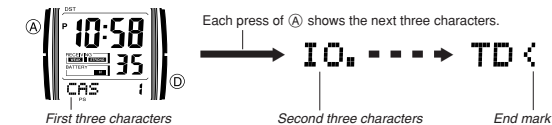
To create a new data memory record

- In the Data Memory Mode, press (A) and (D) at the same time to display the remaining memory screen.
 - You do not have to perform the above step if the remaining memory screen is already on the display.
 - If 0% is shown for remaining memory, it means that memory is full. To store another record, you will first have to delete some of the records stored in memory.
- Hold down (A) until the flashing cursor appears on the display, which indicates the setting screen.
- Use (B) and (D) to cycle through characters at the current cursor location, and (C) to move the cursor to the right. See "Inputting Text" for more information.
 - If memory becomes full while you are inputting text, the cursor will jump to the first (leftmost) character of the text when you press (C), instead of advancing to the right.
- Press (A) to store your data and return to the data memory record screen (without the cursor).
 - The message SET appears for about two seconds, followed by a data memory record screen, which shows the text you just input, along with a record number automatically assigned by the watch.



To recall data memory records

- In the Data Memory Mode, press (D) to scroll forward through data memory records.
 - Each press of (D) advances to the next record and shows its record number and first three characters of its text.
 - Pressing (D) while the last record in memory is on the display changes to the remaining memory screen. Pressing (D) again displays the first record.
- Use (A) to scroll through the text, three characters at a time.



- An end mark indicates the end of the text.

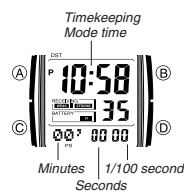
To edit a data memory record

- In the Data Memory Mode, display the record you want to edit.
- Hold down (A) until the flashing cursor appears on the display.
- Press (C) to move the flashing to the character you want to change.
- Use (D) and (B) to change the character.
- After making the changes you want, press (A) to store them and return to the data memory record screen.

To delete a data memory record

- In the Data Memory Mode, display the record you want to delete.
- Hold down (A) until the flashing cursor appears on the display.
- Press (B) and (D) at the same time to delete the record.
 - The message CLR appears to indicate that the record is being deleted. After the record is deleted, the cursor appears on the display, ready for input.
- Input data or press (A) to return to the remaining memory screen.

Stopwatch

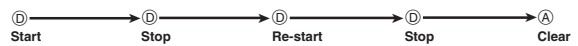


The stopwatch lets you measure elapsed time, split times, and two finishes.

- 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 on the display 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

Elapsed Time



Split Time



Two Finishes



Illumination



The watch has an EL (electro-luminescent) panel that causes the entire display to glow for easy reading in the dark.

- See "Illumination Precautions" for other important information.

To turn on illumination

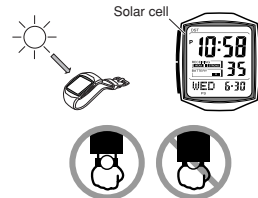
- Press (B) in any mode to illuminate the display.
- You can specify 1.5 seconds or 2.5 seconds as the illumination duration. See "To set the current time and date manually" for more information.

Battery

This watch is equipped with a solar cell and a rechargeable battery (secondary battery) that is 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 when any part of the solar cell is 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.

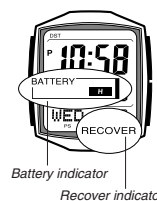


Important!

- 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.
- Normally, the rechargeable battery should not need replacement, but after very long use over a number of years, the rechargeable battery may lose its ability to achieve a full charge. Should you notice problems with getting the rechargeable battery to a full charge, contact your dealer or CASIO distributor about having it replaced.
- The rechargeable battery should be replaced with a CASIO-specified CTL1616 battery only. Other rechargeable batteries can cause damage to 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 when you have the battery 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 battery from going dead.

Battery Power Indicator and Recover Indicator

The battery power indicator on the display shows you the current status of the rechargeable battery's power.



Level	Battery Power Indicator	Function Status
1	BATTERY [Full bar]	All functions enabled.
2	BATTERY [4/5 bar]	All functions enabled.
3	BATTERY [3/5 bar] (Charge Soon Alert)	Auto and manual receive, alarm, hourly time signal, illumination, and display are disabled.
4	BATTERY [1/5 bar]	All functions, including timekeeping, disabled.

- The flashing charge indicator (CHG) 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 battery is charged, but you need to set the time and date, after the battery reaches Level 2 after dropping to Level 4.
- Leaving the watch in direct sunlight or some other very strong light source can cause the battery power indicator to temporarily show a reading that is higher than the actual battery level. The correct battery 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 indicator appears on the display and the following operations become disabled until battery power recovers.

Illumination

Beeper tone

Time calibration signal reception

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 battery. Also note that allowing the watch to become very hot can cause its liquid crystal display to black out. The appearance of the LCD should become normal again when the watch returns to a lower temperature.

Warning!

Leaving the watch in bright light to charge its rechargeable battery 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
- Too close to an incandescent lamp
- Under direct sunlight

Charging Guide

After a full charge, timekeeping remains enabled for up to about 7 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)	5 minutes
Sunlight Through a Window (10,000 lux)	24 minutes
Daylight Through a Window on a Cloudy Day (5,000 lux)	48 minutes
Indoor Fluorescent Lighting (500 lux)	8 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
 - 5 times calibration reception per day
- Stable operation is promoted by frequent charging.

Recovery Times

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

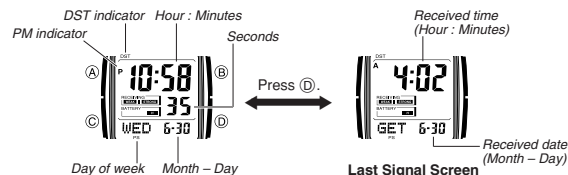
Exposure Level (Brightness)	Approximate Exposure Time			
	Level 4	Level 3	Level 2	Level 1
Outdoor Sunlight (50,000 lux)	1 hour	12 hours	6 hours	
Sunlight Through a Window (10,000 lux)	5 hours	60 hours	28 hours	
Daylight Through a Window on a Cloudy Day (5,000 lux)	10 hours	---	---	
Indoor Fluorescent Lighting (500 lux)	94 hours	---	---	

- The above exposure time values are all for reference only. Actual required exposure times depend on lighting conditions.

Timekeeping

Use the Timekeeping Mode to set and view the current time and date. This section also explains how to manually set the current date and time.

- When setting the time, you can also configure settings for the illumination duration, the 12/24-hour format, and power saving on/off.
- All of the operations in this section are performed in the Timekeeping Mode, which you can enter by pressing (C).

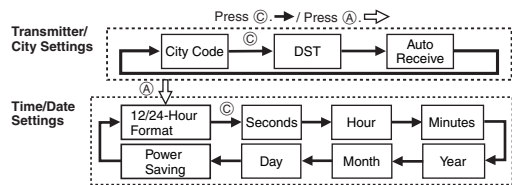


Setting the Time and Date Manually

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 Timekeeping Mode settings. Because of this, World Time Mode times will not be correct if you do not select the proper Home City code before setting the time and date in the Timekeeping Mode.

To set the current time and date manually

1. In the Timekeeping Mode, hold down (A) until the city code starts to flash, which indicates the setting screen.
2. Use (A) or (C) to move the flashing in the sequence shown below to select other settings.



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

Transmitter/City Settings

Screen:	To do this:	Do this:
BER	Change the city code	Use (D) (east) and (B) (west).
DST A	Toggle between Daylight Saving Time (ON), Standard Time (OFF), or Auto DST (F)	Press (D).
R./C 0n	Toggle between auto receive on (0n) and off (OFF)	Press (D).

- See "City Code Table" for a complete list of available city codes.

Time/Date Settings

Screen:	To do this:	Do this:
12H	Toggle between 12-hour (12H) and 24-hour (24H) timekeeping	Press (D).
35	Reset the seconds to 35	Press (D).
10:58	Toggle the illumination duration setting between 1.5 seconds (1.5) and 2.5 seconds (2.5)	Press (B).
10:58	Change the hour or minutes	Use (D) (+) and (B) (-).
04 6:30	Change the month, day or year	Use (D) (+) and (B) (-).
PS 0n	Toggle Power Saving on (0n) and off (OFF)	Press (D).

- For information about settings other than the time and date, see the following.
 - Illumination duration: Illumination
 - Power Saving: Power Saving Function

4. Use (A) to exit the setting screen.
- If a Transmitter/City Setting screen is displayed, press (A) twice.
- If a Time/Date Setting screen is displayed, press (A) once.

Note

- Auto DST (F) can be selected only while BER, FAR, LON, or ATH is selected as the Home City code. For more information, see "Daylight Saving Time (DST)" below.
- The auto receive setting is used for time calibration signal reception only. See "About Auto Receive" for details.

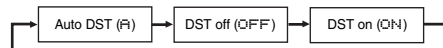
Daylight Saving Time (DST)

Daylight Saving Time (summer time) advances the time setting by one hour from Standard Time. Remember that not all countries or even local areas use Daylight Saving Time. The time calibration signal transmitted from Mainflingen includes both Standard Time and DST data. When the Auto DST setting is turned on, the watch switches between Standard Time and DST (summer time) automatically in accordance with the Mainflingen signal.

- The default DST setting is Auto DST (F) whenever you select BER, FAR, LON, or ATH as your Home City code.
- If you experience problems receiving the time calibration signal in your area, it is probably best to switch between Standard Time and Daylight Saving Time (summer time) manually.

To change the Daylight Saving Time (summer time) setting

1. In the Timekeeping Mode, hold down (A) until the city code starts to flash, which indicates the setting screen.
2. Press (C) once to display the DST setting screen.
3. Use (D) to cycle through the DST settings in the sequence shown below.



4. When the setting you want is selected, press (A) twice to exit the setting screen.
- The DST indicator appears on the display to indicate that Daylight Saving Time is turned on.

Reference

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

Power Saving Function

When turned on, the Power Saving function automatically enters a sleep state whenever the watch is left for a certain period in an area where it is dark. The table below shows how watch functions are affected by the Power Saving function.

Elapsed Time in Dark	Display	Operation
60 to 70 minutes	Blank, with PS flashing	Display is off, but all functions are enabled.
6 or 7 days	Blank, with PS not flashing	All functions are disabled, but timekeeping is maintained.

- Wearing the watch inside the sleeve of clothing can cause it to enter the sleep state.
- The watch will not enter the sleep state while the Timekeeping Mode time is between 6:00 AM and 9:59 PM. If the watch is already in the sleep state when the time reaches 6:00 AM, however, it will remain in the sleep state.
- The watch will not enter the sleep state while it is in the Stopwatch Mode.

Operation Guide 2812

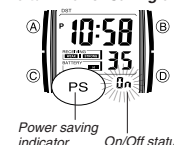
CASIO®

To recover from the sleep state

Perform any one of the following operations.

- Move the watch to a well-lit area. It can take up to two seconds for the display to turn on.
- Press any button.

To turn Power Saving on and off



Power saving indicator On/Off status

1. In the Timekeeping Mode, hold down (A) until the city code starts to flash, which indicates the setting screen.
 2. Press (A) again.
 3. Press (C) seven times until the Power Saving on/off screen appears.
 4. Press (D) to toggle Power Saving on (P) and off (PF).
 5. Press (A) to exit the setting screen.
- The Power Saving indicator (PS) is on the display in all modes while the Power Saving is turned on.

Auto Return Features

- If you leave the watch in the Alarm or Data Memory 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 or cursor on the display for two or three minutes without performing any operation, the watch automatically exits the setting screen.

Scrolling

The (B) and (D) buttons are used in various modes and setting screens to scroll through data on the display. 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, Alarm, or Data Memory Mode, the data you were viewing when you last exited the mode appears first.

Radio-controlled Timekeeping Precautions

- Strong electrostatic charge can result in the wrong time being set.
- Even when the watch is within the reception range of the transmitter, signal reception will be impossible if the signal is blocked by mountains or other geological formations between the watch and signal source.
- Signal reception is affected by weather, atmospheric conditions, and seasonal changes.
- The time calibration signal bounces off the ionosphere. Because of this, such factors as changes in the reflectivity of the ionosphere, as well as movement of the ionosphere to higher altitudes due to seasonal atmospheric changes or the time of day may change the reception range of the signal and make reception temporarily impossible.
- Even if the time calibration signal is received properly, certain conditions can cause the time setting to be off by up to one second.
- The current time setting in accordance with the time calibration signal takes priority over any time settings you make manually.
- The watch is designed to automatically update the date and day of the week for the period January 1, 2000 to December 31, 2099. Setting of the date by the time calibration signal cannot be performed starting from January 1, 2100.
- This watch can receive signals that differentiate between leap years and non-leap years.
- Though this watch is designed to receive both time data (hour, minutes, seconds) and date data (year, month, day), certain signal conditions can limit reception to time data only.
- Normally, the signal reception date shown by the last signal screen is the date data included in the received time calibration signal. When only time data is received, however, the last signal screen shows the date as kept in the Timekeeping Mode at the time of signal reception.
- If you are in an area where proper time calibration signal reception is impossible, the watch keeps time within ±15 seconds a month at normal temperature.
- If you have problems with proper time calibration signal reception or if the time setting is wrong after signal reception, check your current city code, DST (summer time), and auto receive settings. The following are the initial factory defaults for these settings.

Setting	Initial Factory Default
City code	BER (Berlin)
DST (summer time)	OFF (Auto switching)
Auto receive	R/C ON (Auto receive)

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 year can be set in the range of 2000 to 2099.
 - 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 battery 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 maintained atomic (cesium) clocks that keep time accurately to within microseconds. Leap 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

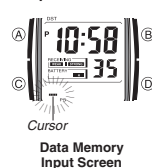
The 12-hour/24-hour timekeeping format you select in the Timekeeping Mode is also applied in all other modes.

- With the 12-hour format, the P (PM) indicator appears for times in the range of noon to 11:59 p.m. and the A (AM) indicator appears for times in the range of midnight to 11:59 a.m.
- With the 24-hour format, times are displayed in the range of 0:00 to 23:59, without any indicator.

Inputting Text

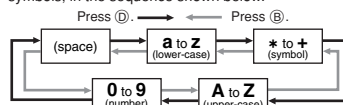
The following describes how to input text in the Data Memory Mode.

To input characters



Data Memory Input Screen

1. When the cursor is on the display, use (B) and (D) to cycle through the available letters, numbers and symbols, in the sequence shown below.



2. When the character you want is at the cursor position, press (C) to move the cursor to the right.
 3. Repeat steps 1 and 2 to input the rest of the characters you want.
- See the "Character List" for information about the characters you can input.

Data Memory Management

Data memory can hold up to 315 characters total, while each record can contain up to 63 characters. This means that 40 records can be stored in data memory when each record contains seven characters of text or less.

Illumination Precautions

- The electro-luminescent panel that provides illumination loses power after very long use.
- The illumination provided by the backlight may be hard to see when viewed under direct sunlight.
- Illumination automatically turns off whenever an alarm sounds.
- The watch may emit an audible sound whenever the display is illuminated. This is due to vibration of the EL panel used for illumination, and does not indicate malfunction.
- Frequent use of illumination runs down the battery.

City Code Table

City Code	City	GMT Differential	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	El Paso, Edmonton
CHI	Chicago	-06.0	Houston, Dallas/Ft. 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, Pt. 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	+01.0	Milan, Rome, Amsterdam, Algiers, Hamburg, Frankfurt, Vienna, Stockholm
BER	Berlin		
ATH	Athens		Helsinki, Istanbul, Beirut, Damascus, Cape Town
CAI	Cairo	+02.0	
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	Pt. Vila
WLG	Wellington	+12.0	Christchurch, Nadi, Nauru Is.

• Based on data as of June 2003.

Character List

(space)	i	l	r	r	*	*	%	%	
a	a	j	j	s	S	-	-	.	.
b	b	k	k	t	T	_	_	:	:
c	c	l	l	u	U	@	@	'	'
d	d	m	m	v	V	~	~	,	,
e	e	n	n	w	W	/	/	&	&
f	f	o	o	x	X	?	?	=	=
g	g	p	P	y	Y	#	#	÷	÷
h	h	q	Q	z	Z	!	!	x	x

-	-	H	H	Q	Q	Z	Z	8	8
+	+	I	I	R	R	0	0	9	9
A	A	J	J	S	S	1	1		
B	B	K	K	T	T	2	2		
C	C	L	L	U	U	3	3		
D	D	M	M	V	V	4	4		
E	E	N	N	W	W	5	5		
F	F	O	O	X	X	6	6		
G	G	P	P	Y	Y	7	7		