## CASIO

### 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.

## Keep the watch exposed to bright light

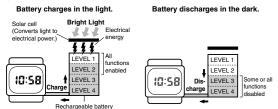


d to bright light The electricity generated by the solar cell of the watch is stored by a built-in battery. Leaving or using the watch where it is not exposed to light causes the battery to run down. Make sure the watch is exposed to light as much as receible

down. Make sure the watch is exposed to an approximate the possible.
When you are not wearing the watch on your wrist, position the face so it is pointed at a source of bright light.
You should try to keep the watch outside of your sleeve as much as possible. Charging is reduced significantly if the face is only partially covered.

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The watch continues to operate, even when it is not exposed to light. Leaving the
watch in the dark can cause the battery to run down, which will result in some watch
functions being disabled. If the battery goes dead, you will have to re-configure
watch settings after recharging. To ensure normal watch operation, be sure to keep it
exposed to light as much as possible.



Depending on the model of your watch, display text appears either as dark figures on a light background, or light figures on a dark background. All sample displays in this manual are shown using dark figures on a light

Button operations are indicated using the letters shown

Eactor 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.

The actual level at which some functions are disabled depends on the watch model.
Be sure to read "Power Supply" (page E-33) for important information you need to know when exposing the watch to bright light.

#### If the display of the watch is blank ...

If the display of the watch is blank, it means that the watch's Power Saving function has turned off the display to conserve power.
See "Power Saving Function" (page E-46) for more information.

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About This Manual

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Procedure Lookup The following is a handy reference list of all the operational procedures contained in this manual

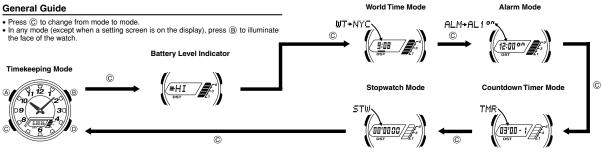
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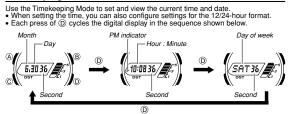
#### **General Guide**



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## CASIO

#### Timekeeping



- All of the operations in this section are performed in the Timekeeping Mode, which you can enter by pressing C (page E-8).

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3. While the setting you want to change is flashing, use (D) and (B) to change it as explained below

Screen:	To do this:	Do this:
ΤYΟ	Change the city code	Press (D) (east) and (B) (west).
OFF	Toggle between Daylight Saving Time ( <b>ON</b> ) and Standard Time ( <b>OFF</b> ).	Press D.
12H	Toggle between 12-hour ( <b>12H</b> ) and 24-hour ( <b>24H</b> ) timekeeping	Press D.
36	Reset the seconds to 00	Press D.

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4. Press (A) to exit the setting screen.
The day of the week is automatically displayed in accordance with the date (year, month, and day) settings.

- 12-hour and 24-hour timekeeping
  With the 12-hour format, the P (PM) indicator appears to the left of the hour digits for times in the range of noon to 11:59 p.m. and no 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
- Will the 24-hour to many end of a part of a par

### 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.

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#### 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 analog timepiece move to adjust to a new setting whenever any of
- The hands for the analog timepiece move to adjust to a new setting whenever any of the following occurs. When you change the digital time setting When you change the Home City code and/or DST setting If the analog time does not match the digital time for any reason, use the procedure described under "To adjust home positions" (page E-42) to match the analog setting to the digital desting
- Whenever you need to adjust norme positions (page E-42) to match the analog sett to the digital setting.
  Whenever you need to adjust both the digital and the analog time settings, make sure you adjust the digital setting first.
  Depending on how much the hands have to move in order to synchronize to the digital time, it may take some time before they stop moving.

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To view the time in another city If you press () while in the World Time Mode, your currently selected World Time City code will appear on the digital display for about two seconds. After that, the current time in that city will appear. Pressing () again while the World Time City code is displayed will scroll to the next city code. • For full information on city codes, see the "City Code Table" at the back of this manual

manual.

## To toggle a city code time between Standard Time and Daylight Saving Time 1. In the World Time Mode, use ① to display the city code (itme zone) whose Standard Time/Daylight Saving Time cetting volument to whose of the other one other one of the other one other

Ð 9:08 //\_ DST indicator

- (Inite Zolle) want to change.
   Hold down (A) to toggle Daylight Saving Time (DST indicator displayed) and Standard Time (DST indicator displayed)
- not displayed). The **DST** indicator will appear on the display whenever you display a city code for which Daylight Saving Time is turned on.

## Setting the 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 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 digital time and date

 City code

 City

E-11

Screen:	To do this:	Do this:
<i>₀ 10:00</i>	Change the hour or minutes	Use () (+) and () (-).
20 11	Change the year	
6,30	Change the month or day	
MUTE	Toggle the button operation tone between KEY (off)	Press D.
LT1	Toggle the illumination duration between LT1 (approximately 1.5 seconds) and LT3 (approximately 3 seconds).	Press D.
ENG	Change the day of the week language ENG: English POR: Portuguese ESP: Spanish FRA: French DEU: German ITA: Italian	Use () (+) and () (-).
• See "(	City Code Table" at the back of this manual	for a complete list of available

city codes E-13

To change the Daylight Saving Time (summer time) setting 1. In the Timekeeping Mode, hold down (A) for about two seconds, until "ADJ" appears

- Your current Home City code will be flashing on the screen.
  Your current Home City code will be flashing on the screen.
  Press (a) to toggle between Daylight Saving Time (**OR** displayed) and Standard Time (**OFF** displayed).
  When the setting you want is selected, press (a) to exit the setting screen.
  The **DST** indicator appears on the display to indicate that Daylight Saving Time is turned on
- turned on.

## World Time



- The World Time Mode digitally displays the current time in 48 cities (31 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 (page E-11). After you press © to enter the World Time Mode, your currently selected World Time City code will appear on the digital display for about two seconds. After that, the current time in that city will appear. All of the operations in this section are performed in the World Time Mode, which you enter by pressing © (page E-9).

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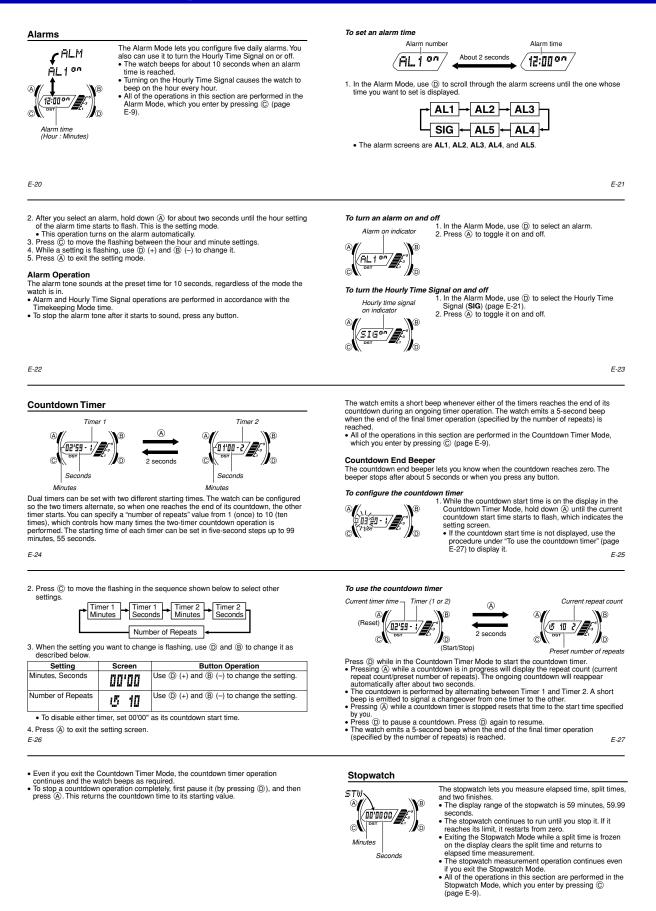
 Note that the DST/Standard Time setting affects only the currently displayed city code. Other city codes are not affected

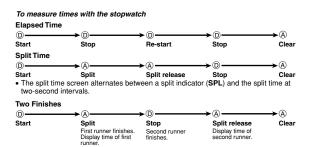
Swapping your Home City and World Time City You can use the procedure below to swap your Home City and World Time City. This changes your Home City to your World Time City, and your World Time City to your Home City. This capability can come in handy when you frequently travel between two cities in different time zones.

- To swap your Home City and World Time City
  1. In the World Time Mode, use (1) to select the World Time City you want.
  2. Hold down (a) and (b) until the watch beeps.
  This will make the World Time City you selected in step 1 your Home City, and cause the hour and minute hands to move to the current time in that city. At the same time, it will change the Home City you had selected prior to step 2 your World Time City.
  After swapping the Home City and World Time City, the watch stays in the World Time Kity and World Time City that was selected as the Home City prior to step 2 now displayed as the World Time City.

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- To specify the illumination duration 1. In the Timekeeping Mode, hold down (a) until the display contents start to flash. This is the setting screen. 2. Press (0) 10 times until the current illumination duration setting (LT1 or LT3) appears.
  - 3. Press (1) to toggle the setting between LT1 (approximately 1.5 seconds) and LT3 (approximately 3
  - seconds). 4. Press (A) to exit the setting screen.

#### E-32

- 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. Be sure that the watch is exposed to bright light whenever
- bower to run down. Be sure that the watch is exposed to bright light whenever possible.
  This watch uses a rechargeable battery to store power produced by the solar cell, so regular battery replacement is not required. However, after very long use, the rechargeable battery may lose its ability to achieve a full charge. If you experience problems getting the rechargeable battery to charge fully, contact your dealer or CASIO distributor about having it replaced.
  Never try to remove or replace the watch's techargeable battery yourself. Use of the wrong type of battery can damage the watch.
  The current time and all other settings return to their initial factory defaults whenever battery power drops to Level 5 (pages E-36 and E-37) and when you have the battery replaced.
  Turn on the watch's Power Saving function (page E-46) 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.

- the rechargeable battery from going dead.
- E-34

. The battery level indicator shows the current power level of the rechargeable battery. Level Battery Level Indicator Function Status

1	<b>HI</b>	All functions enabled.
2	(III)	All functions enabled.
3	(Charge Soon Alert)	Key operation tone, alarm, Hourly Time Signal, and illumination disabled.
4		All hands stop at 12 o'clock. All operations disabled.
5		All functions, including timekeeping, disabled and initialized.
		disabled and initialized.

E-36

- er indicator
- Performing illumination, or beeper operations during a short period may cause ■R (recover) to appear on the display
  - orsplay. After some time, battery power will recover and ₩R (recover) will disappear, indicating that the above functions are enabled again. If ₩R (recover) appears frequently, it probably means that remaining battery power is low. Leave the watch in bright light to allow it to charge.

## Illumination



An LED (light-emitting diode) illuminate the display for easy reading in the dark.

To illuminate the display In any mode (except when a setting screen is on the display), press (B) to turn on illumination. • You can use the procedure below to select either 1.5 seconds or 3 seconds as the illumination duration. When you press (B), the illumination will remain on for about 1.5 seconds or 3 seconds, depending on the current illumination duration setting. illumination duration setting.

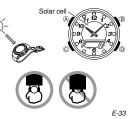
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### **Power Supply**

This watch is equipped with a solar cell and a rechargeable 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

- 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.
   You should try to keep the watch outside of your sleeve as much as possible Charging.
- your sleeve as much as possible. Charging is reduced significantly if the face is covered only partially.



To check the current battery level When the battery level is at Level 1 (HI) or Level 2 (MID), the corresponding battery level indicator (HI or MID, page E-8) will appear only if you press © in the Timekeeping Mode. For other battery levels, the applicable indicator appears automatically

Battery level indicator



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- The ₱Lû indicator 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 5, all functions are disabled and settings return to their initial factory defaults. Once the battery reaches Level 2 after falling to Level 5, reconfigure the current time, date, and other settings.
   Display indicators reappear as soon as the battery is charged from Level 5 to Level 2.
   Leaving the watch exposed to direct sunlight ro some other very strong light source can cause the battery level. The correct battery level should be indicated after a few minutes.

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#### **Charging Precautions**

Charging recautions 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!

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

Under direct sunlight

## CASIO

#### Charging Guide

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)	8 minutes	
Sunlight Through a Window (10,000 lux)	30 minutes	
Daylight Through a Window on a Cloudy Day (5,000 lux)	48 minutes	
Indoor Eluorescent Lighting (500 lux)	8 hours	

For details about the battery operating time and daily operating conditions, see the "Power Supply" section of the Specifications (page E-52).
Stable operation is promoted by frequent exposure to light.

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### **Adjusting Home Positions**

Strong magnetism or impact can cause the hands of the watch to be off. If this happens, perform the applicable home position adjustment procedures in this section. • Hand home position adjustment is not required if the analog time and digital time are the same in the Timekeeping Mode.

#### To adjust home positions

- In the Timekeeping Mode, hold down (A) for about five seconds. You can release the button after "H.SET" appears on the display.
   Though "ADJ" will appear on the display after about two seconds, do not release the button yet. Keep it depressed until "H.SET" appears.

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### 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.

#### **Button Operation Tone**

The button operation tone sounds any time you press one of the watch's buttons. You can turn the button operation tone on or off as desired. • Even if you turn off the button operation tone, alarms, the Hourly Time Signal, and other beepers all operate normally.

#### ecovery Times

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

Exposure Level	Approxim	ate Exposu	ire Time		
(Brightness)	Level 5	Level 4	Level 3	Level 2	Level 1
Outdoor Sunlight (50,000 lux)		3 hours		35 hours	10 hours
Sunlight Through a Window (10,000 lux)		10 hours		133 hours	36 hours
Daylight Through a Window on a Cloudy Day (5,000 lux)		16 hours		216 hours	58 hours
Indoor Fluorescent Lighting (500 lux)		194 hours			

The above exposure time values are all for reference only. Actual required exposure times depend on lighting conditions. E-41



Correct hour and minute hand positions The hour and minute hands should move to 12 o'clock (their home position), and "0:00" will flash on the display.
 If the hour and minute hands are not at 12 o'clock,

- If the hour and minute hands are not at 12 o clock, use (D) (+) and (B) (-) to move them there.
  Holding down either button will cause the hands to move at high speed. Once started, high-speed hand movement will continue even if you release the button. To stop high-speed hand movement, press any button. High-speed hand movement started with the (D) (+) button will stop automatically after 12 revolutions of the minute hand. If started with the (B) (-) button, it will stop after one revolution of the minute hand. will stop after one revolution of the minute hand.

After everything is the way you want, press () to return to the Timekeeping Mode.
 After performing home position adjustment, enter the Timekeeping Mode and check to make sure that the analog hands and the digital display indicate the same time. If they do not, perform home position adjustment again.

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E-45

### To turn the button operation tone on and off



- In the Timekeeping Mode, hold down (A) for about two seconds, until "ADJ" appears on the display.
   Your current Home City code will be flashing on the
- Your current home City code will be hashing on the screen.
  Press © nine times until the current button operation tone setting (KEY → or MITE) appears.
  Press © to toggle the setting between KEY → (tone on) and MITE (tone off).
  Press (A) to exit the setting screen.

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## **Power Saving Function**



The Power Saving function enters a sleep state automatically whenever the watch is left in an area for a certain period where it is dark (except if the watch is in the Stopwatch or Timer mode). The table below shows how watch functions are affected by the Power Saving

Elapsed Time in Dark	Display	Operation
60 to 70 minutes	Blank	All functions enabled, except for the display
6 or 7 days		•Beeper tone, illumination, and display disabled •Analog timekeeping stopped at 12 o'clock

. Wearing the watch inside the sleeve of clothing can cause it to enter the sleep state. Weating the watch inside the sleep state between 6:00 AM and 9:59 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. Move the watch to a well-lit area. Press any button.

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E-46

#### Auto Return Features

- If you leave the watch in the Alarm Mode, or with the battery level indicator displayed 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 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 Mode or Alarm Mode, the data you were viewing when you last exited the mode appears first.

#### eping

- 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 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 5. Level 5
- The current time for all city codes in the Timekeeping Mode and World Time Mode is calculated in accordance with the Coordinated Universal Time (UTC) for each city, based on your Home City time setting.

#### Illumination Precautions

- Illumination may be hard to see when viewed under direct sunlight.
  Illumination automatically dims if it is lit and an alarm or time up alarm sounds.
  Frequent use of illumination runs down the battery.

CASIO

## Specifications

 Spectric/ations

 Accuracy at normal temperature: ± 30 seconds a month

 Digital Timekeeping: Hour, minutes, seconds, p.m. (P), month, day, day of the week

 Time system: Switchable between 12-hour and 24-hour formats

 Calendar system: Full Auto-calendar pre-programmed from the year

 2000 to 2099

 Other: Home city code (can be assigned one of 48 city codes); Daylight

 Saving Time (summer time)/Standard Time

 Analog Timekeeping: Hour, minutes (hand moves every 20 seconds)

 World Time: 48 cities (31 time zones)

 Other: Standard Time/Daylight Saving Time (summer time)

 Alarms: 5 daily alarms; Hourly Time Signal

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## Countdown Timer:

Number of timers: 2 (one set)
Setting unit: 5 seconds
Range: 99 minutes 55 seconds each timer
Countdown unit: 1 second
Number of repeats: 1 to 10
Other: 5-second time up beeper
Stopwatch:
Measuring unit: 1/100 second
Measuring capacity: 59' 59.99"
Measuring modes: Elapsed time, split time, two finishes
Illumination: LED (light-emitting diode); Selectable illumination duration
Other: Battery level indicator; Power Saving; Button operation tone on/off;
6 languages for day of the week

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Power Supply: Solar cell and a rechargeable battery Approximate Battery Operating Time 10 months (from full charge to Level 4 when the watch is not exposed to light) under the following conditions:
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

Frequent use of illumination can shorten battery operating time.

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City C	ode Table	
City Code	City	UTC Offset/ GMT Differential
PPG	Pago Pago	-11
HNL	Honolulu	-10
ANC	Anchorage	-9
YVR	Vancouver	8
LAX	Los Angeles	-8
YEA	Edmonton	-7
DEN	Denver	-/
MEX	Mexico City	-6
CHI	Chicago	
NYC	New York	-5
SCL	Santiago	4
YHZ	Halifax	-4
YYT	St. Johns	-3.5

City Code	City	UTC Offset/ GMT Differential
RIO	Rio De Janeiro	-3
FEN	Fernando de Noronha	-2
RAI	Praia	-1
UTC		
LIS	Lisbon	0
LON	London	
MAD	Madrid	
PAR	Paris	
ROM	Rome	+1
BER	Berlin	
STO	Stockholm	
ATH	Athens	
CAI	Cairo	+2
JRS	Jerusalem	

City Code	City	UTC Offset/ GMT Differential
MOW	Moscow	+3
JED	Jeddah	+3
THR	Tehran	+3.5
DXB	Dubai	+4
KBL	Kabul	+4.5
KHI	Karachi	+5
DEL	Delhi	+5.5
KTM	Kathmandu	+5.75
DAC	Dhaka	+6
RGN	Yangon	+6.5
BKK	Bangkok	+7

City Code	City	UTC Offset/ GMT Differential
SIN	Singapore	+8
HKG	Hong Kong	
BJS	Beijing	
TPE	Taipei	
SEL	Seoul	+9
TYO	Tokyo	
ADL	Adelaide	+9.5
GUM	Guam	+10
SYD	Sydney	
NOU	Noumea	+11
WLG	Wellington	+12

Based on data as of December 2010.
The rules governing global times (UTC offset and GMT differential) and summer time are determined by each individual country.

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