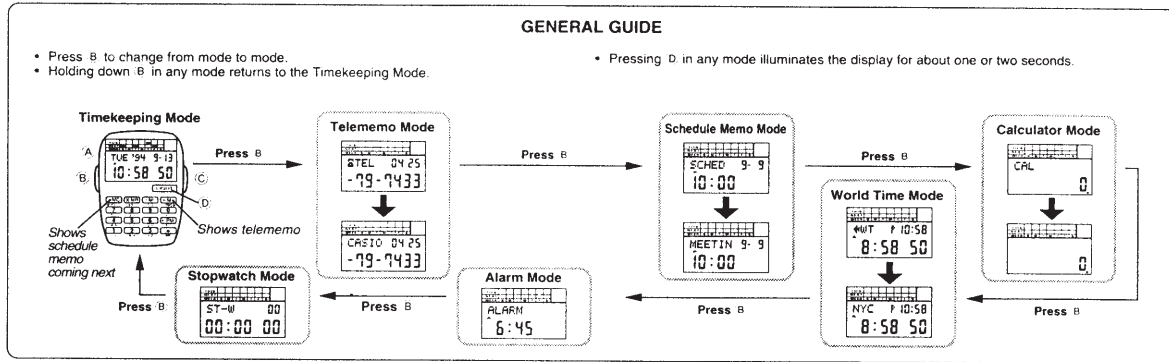


OPERATION CHART:MODULE QW-1276



INPUTTING TEXT AND NUMBERS

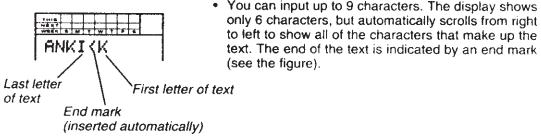
Text Area (up to 9 characters) There are two areas in the display which you can input text and numbers in: Text Area and Number Area.

Text Area

You can input alpha characters (from A through Z), numbers, hyphens, spaces, periods, and colons as text for the Telememo's name and memo, the Schedule Memo Mode's message.

- Hold down (A) to make the cursor appear in the mode where you want to input text.
- While the cursor is in the text area, use the key pad to input characters.
 - Note that each key is assigned more than one character. Each press of a key sequentially changes the character at the cursor's position. When you press (1), for example, the input character changes in the sequence: U → V → 1 → U → V etc. The letters that a key inputs are printed below the key, while the number it inputs is printed on the key.

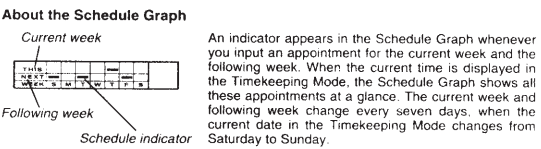
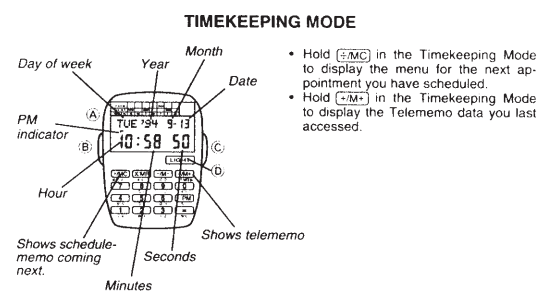
- To input spaces: use []
 - To input periods: use [.]
 - To input hyphens: use [-]
 - To input colons: use [:]
- When the character you want is displayed at the cursor position, press (D) to move the cursor to the right.
 - To make changes and corrections, you can use (B) and (D) to move the cursor between characters.
 - Repeat steps 2 and 3 to input the rest of the characters you want.
 - You can input up to 9 characters. The display shows only 6 characters, but automatically scrolls from right to left to show all of the characters that make up the text. The end of the text is indicated by an end mark (see the figure).



Number Area

You can input numbers, hyphens and spaces for telephone numbers in the Telememo Mode's Number Area, and for the dates and times in other modes (except the Stopwatch Mode).

- Hold down (A) to make the cursor appear in the mode where you want to input numbers.
- While the cursor is in the number area, use the key pad to input characters.
 - Use [] to input spaces and [-] to input hyphens.
 - Each time you input a digit, the cursor automatically moves to the right.
 - Note that you can use (B) and (D) to move the cursor between digits to make changes and corrections.

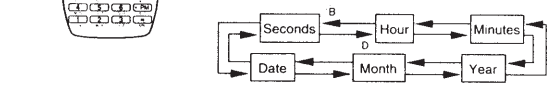


When the appointment indicated by a schedule indicator is for the current date, that indicator flashes in the graph. An alarm sounds for 20 seconds when the schedule time for that appointment is reached (in the Timekeeping Mode, the reminder message you input for that appointment also appears on the display). You can press any key on the keypad or any button to stop the alarm once it starts to sound. See "To input Schedule Memo data" on the next page for details on inputting schedules.

- The alarm does not sound in the following conditions:
 - Adjusting time or date in the Timekeeping Mode
 - Inputting data in the Schedule Memo Mode

To set the time and date

- Press (A) while in the Timekeeping Mode. The seconds digits flash on the display because they are selected.
- Press (B) or (D) to change the selection in the following sequence. Holding down either button changes the current selection at high speed.

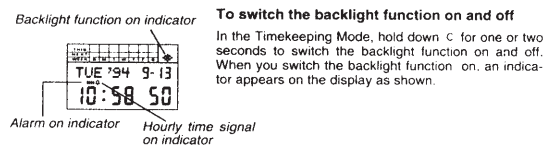


- While the selection is flashing, press (C) to switch between 12-hour and 24-hour formats.
- While the seconds digits are selected (flashing), press [0] to reset the seconds to "00". If you press [0] while the seconds count is in the range of 30 to 59, the seconds are reset to "00" and 1 is added to the minutes. If the seconds count is in the range of 00 to 29, the minutes count is unchanged.
- While any other digits (besides seconds) are selected (flashing), press the keys on the key pad to input the numbers you want.
 - If you are using the 12-hour timekeeping format, the A (AM) or P (PM) indicator flashes along with the hour digit. Press [PM] to switch between AM and PM.
 - The date can be set within the range of January 1, 1990 to December 31, 2089. Inputting a year from 90 to 99 is set as 1990 to 1999, while an input from 00 to 89 is set as 2000 to 2089.
- After you set the time and date, press (A) to return to the Timekeeping Mode.
 - The day of the week is automatically set in accordance with the date.
 - If you do not operate any button for a few minutes while a selection is flashing, the flashing stops and the watch goes back to the normal Timekeeping Mode automatically (No cursor appears and no digit's flashing).

About the backlight

When you switch the backlight function on, the backlight of the watch flashes whenever a daily alarm, hourly time signal or schedule time alarm is sounding.

- The backlight of this watch employs an electro-luminescent (EL) light, which loses its illuminating power after very long term use.



- The backlight function indicator remains on the display in all modes until you switch the backlight function off.
- The above operation controls operation of the backlight function only. It does not affect operation of audible tones and signals.
- The watch emits an audible sound whenever the display is illuminated. This is caused because the EL light vibrates slightly when lit. It does not indicate malfunction of the watch.

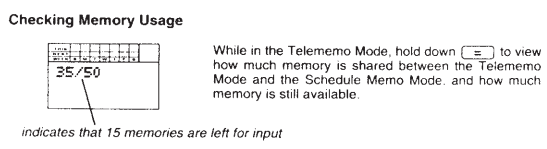
TELEMEMO MODE

The Telememo Mode lets you store 50* pairs of name and telephone number data. The name can be up to 9 characters long and the numbers 12 digits each. Data is automatically sorted into alphabetic order based on the name data. You can recall data by scrolling through a sorted list.

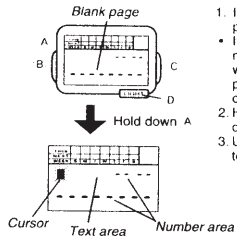
* The Telememo Mode shares memory with the Schedule Memo Mode. This means that the maximum number of Telememo Mode entries you can store is reduced each time you store data in the Schedule Memo Mode.

Note

- If you do not operate any button for a few minutes while in the Telememo Mode, the watch automatically goes back to the Timekeeping Mode.



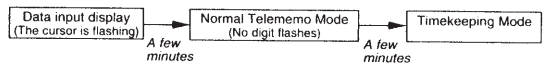
To input Telememo data (Before reading this section, see "INPUTTING TEXT AND NUMBERS" on the first page for details on inputting texts and numbers)



- In the Telememo Mode, use $\left[\frac{1}{2} \text{MC} \right]$ or $\left[\frac{1}{2} \text{M+} \right]$ to display the blank page.
 - If the message "FULL" appears on the display, it means that memory is full. To store more data, you will first have to delete some from memory. Use the procedure on "To delete a specific telememo data" on this page to delete data.
- Hold down A to make the cursor appear on the display.
- Use $\left[\frac{1}{2} \text{M+} \right]$ or $\left[\frac{1}{2} \text{MC} \right]$ to move the cursor through the text area and the number area.

- While the cursor is in the text area, use the key pad to input the text you want.
- After you select the character you want, press D to advance the cursor to the right.
 - Repeat steps 4 and 5 until you complete your text input.
- While the cursor is in the number area, use the key pad to input the numbers you want.
 - Note that you must input at least one character in the text area. You can skip input of phone number.
- After inputting the data you want, press A to store it into memory.
 - The message "SORT" appears on the display and stays there while data is being stored into chronological order. The new input display appears after the sort operation is complete.

The following shows how the display automatically changes if you do not operate any button for a few minutes while in the Telememo Mode.



To edit data stored in memory

- While in the Telememo Mode, use $\left[\frac{1}{2} \text{MC} \right]$ or $\left[\frac{1}{2} \text{M+} \right]$ to scroll through the data items and display the one you want to edit.
- Hold down A and the cursor appears on the display.
- Use B and D to move the cursor to the character you want to change.
- Input the character you want to change to.
- Press A to return to the normal Telememo Mode.

To delete a specific telememo data

- While in the Telememo Mode, use $\left[\frac{1}{2} \text{MC} \right]$ or $\left[\frac{1}{2} \text{M+} \right]$ to display the data item you want to delete.
- Press A and the cursor appears on the display.
- Hold down C until the message "CLEAR" appears on the display and a beep sounds. This indicates that the telephone number under the name you selected are all deleted.
- Input new data or press A to return to the normal Telememo Mode.

SCHEDULE MEMO MODE

The Schedule Memo Mode lets you store the month, date, and time of each appointment, along with a 12-character reminder message. The next schedule appointment appears on the display whenever you enter the Schedule Memo Mode.

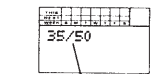
The Schedule Memo Alarm sounds and its message is displayed only if the watch is in the Timekeeping Mode when the applicable date and time are reached. In other modes, only the alarm sounds, without any display of the message. If you are inputting data or changing the time setting when a Schedule Memo Alarm time is reached, the alarm does not sound.

Note that the Schedule Memo Alarm dates you set must be within one year of the current Timekeeping Mode date. This means that if today's date is June 1, you can set a Schedule Memo Alarm date up to May 31 the following year.

Notes

- The Schedule Memo Mode shares memory with the Telememo Mode. This means that the maximum number of Schedule Memo Mode entries you can store is reduced each time you store data in the Telememo Mode.
- If you do not operate any button for a few minutes while in the Schedule Mode, the watch automatically goes back to the Timekeeping Mode.

Checking Memory Usage



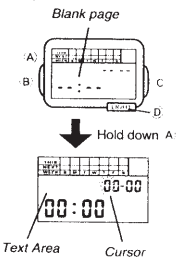
While in the Schedule Memo Mode, hold down $\left[\frac{1}{2} \right]$ to view how much memory is shared between the Schedule Memo Mode and the Telememo Mode, and how much memory is still available.

indicates that 15 memones are left for input

About Schedule Memo Mode memory management...

Schedule Memo Mode data items are automatically sorted into chronological order. When the current (Timekeeping Mode) date changes at midnight each day, Schedule Memo items with dates before the new date are automatically deleted. You can also manually delete Schedule Memo items normally using the procedure under "To delete a specific data".

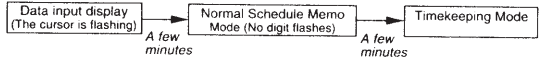
To input Schedule Memo data



- In the Schedule Mode, press $\left[\frac{1}{2} \text{M+} \right]$ or $\left[\frac{1}{2} \text{MC} \right]$ until the blank page appears.
 - If the message "FULL" appears on the display, it means that memory is full. To store more data, you will first have to delete some from memory. Use the procedure on "To delete a specific schedule data" on this page to delete data.
- Hold down A and the digits change to all zeros. A cursor starts to flash.
- Press B or D to move the cursor in the following sequence. Holding down either button changes the current selection at high speed.
 - Month
 - Date
 - Hour
 - Minutes
 - 12-character message

- When the cursor is located at a month, day, or time digit, use the key pad to input the numbers you want.
 - To specify 9 o'clock on August 1, for example input 08-01 9:00.
 - The 12-hour/24-hour format of the alarm time matches the format you select in the Timekeeping Mode.
- If you are using the 12-hour timekeeping format, the A (AM) or P (PM) indicator flashes along with the hour digit. Press $\left[\frac{1}{2} \text{PM} \right]$ to switch between AM and PM.
- While the cursor is in the text (message) area, use the key pad to input the text you want.
- After inputting the data, press A to store it into memory and the watch returns to the normal Schedule Memo Mode (No cursor appears and no digit's flashing).
 - The message "SORT" appears on the display and stays there while data is being stored into chronological order. The new input display appears after the sort operation is complete.
- If you want to input another data item, repeat steps 1 through 6.

The following shows how the display automatically changes if you do not operate any button for a few minutes while in the Schedule Memo Mode.



To search for data

While in the Schedule Memo Mode, press $\left[\frac{1}{2} \text{M+} \right]$ to scroll forward through the stored data, or $\left[\frac{1}{2} \text{MC} \right]$ to scroll back. Holding down either button scrolls at high speed.

To edit data stored in memory

- While in the Schedule Mode, use $\left[\frac{1}{2} \text{M+} \right]$ or $\left[\frac{1}{2} \text{MC} \right]$ to display the data item you want to edit.
- Press A and the cursor appears on the display.
- Use B and D to move the cursor to the character you want to change.
- Input the character you want to change to.
- Press A to exit the data input operation and to return to the normal Schedule Mode.

To delete a specific schedule data

- While in the Schedule Mode, use $\left[\frac{1}{2} \text{M+} \right]$ or $\left[\frac{1}{2} \text{MC} \right]$ to display the data item you want to delete.
- Press A and the cursor appears on the display.
- Hold down C until the message "CLEAR" appears on the display and a beep sounds indicating the data is deleted. At this time the cursor appears on the display ready for input.
- Input new data or press A to exit the data input operation and return to the normal Schedule Mode.

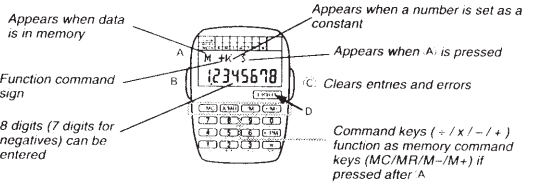
To test the Schedule Memo alarm

Hold down C while in the normal Schedule Memo Mode to sound the alarm.

CALCULATOR MODE

When you are in the Calculator Mode, the key pad keys can be used to input arithmetic calculations and display their results.

- If you do not operate any button for 5 or 6 minutes while in the Calculator Mode, the watch goes back to the Timekeeping Mode automatically.



- To clear a value you have just input, press C.
- If the result of a calculation exceeds 8 digits, an "E" (error) indicator appears on the display. To clear an error and continue with the calculation, press C. To clear the entire calculation, press C twice.

Calculation Examples

Be sure to press the C button when starting calculations.

Basic Calculations

The +, -, x, and + indicators appear on the display whenever you press the corresponding operation key.

Example	Operation	Display
12.3 + 74 - 90 = -3.7	C 12 $\left[\frac{1}{2} \text{MC} \right]$ 3 $\left[\frac{1}{2} \text{MC} \right]$ 74 $\left[\frac{1}{2} \text{MC} \right]$ 90 $\left[\frac{1}{2} \text{MC} \right]$	- 3.7
(12 - 0.5) x 3 ÷ 7 = 4.9285714	C 12 $\left[\frac{1}{2} \text{MC} \right]$ 0.5 $\left[\frac{1}{2} \text{MC} \right]$ 3 $\left[\frac{1}{2} \text{MC} \right]$ 7 $\left[\frac{1}{2} \text{MC} \right]$	4.9285714

Constant Calculations

Input the number you want to use as a constant, and then press one of the arithmetic keys twice. This causes the "K" indicator to appear on the display, indicating constant calculations.

Example	Operation	Display
10 + 7 = 17	C 7 $\left[\frac{1}{2} \text{MC} \right]$ 10 $\left[\frac{1}{2} \text{MC} \right]$	+ K 17.
12 + 7 = 19	12 $\left[\frac{1}{2} \right]$	+ K 19.
78 - 12 = 66	C 12 $\left[\frac{1}{2} \text{MC} \right]$ 78 $\left[\frac{1}{2} \text{MC} \right]$	- K 66.
45 - 12 = 33	45 $\left[\frac{1}{2} \right]$	- K 33.
2 x 12 = 24	C 12 $\left[\frac{1}{2} \text{MC} \right]$ 2 $\left[\frac{1}{2} \text{MC} \right]$	x K 24.
5 x 12 = 60	5 $\left[\frac{1}{2} \right]$	x K 60.
45 ÷ 9 = 5	C 9 $\left[\frac{1}{2} \text{MC} \right]$ 45 $\left[\frac{1}{2} \text{MC} \right]$	÷ K 5.
72 ÷ 9 = 8	72 $\left[\frac{1}{2} \right]$	÷ K 8.
17 + 17 + 17 + 17 = 68	C 17 $\left[\frac{1}{2} \text{MC} \right]$ 17 $\left[\frac{1}{2} \text{MC} \right]$ 17 $\left[\frac{1}{2} \text{MC} \right]$ 17 $\left[\frac{1}{2} \text{MC} \right]$	+ K 68.
(2.3) ⁴ = 27.9841	C 2 $\left[\frac{1}{2} \text{MC} \right]$ 3 $\left[\frac{1}{2} \text{MC} \right]$ 4 $\left[\frac{1}{2} \text{MC} \right]$ $\left[\frac{1}{2} \text{MC} \right]$ $\left[\frac{1}{2} \text{MC} \right]$	x K 27.9841
*To perform the above as (2.3 ²) ²		
	C 2 $\left[\frac{1}{2} \text{MC} \right]$ 3 $\left[\frac{1}{2} \text{MC} \right]$ 2 $\left[\frac{1}{2} \text{MC} \right]$ 2 $\left[\frac{1}{2} \text{MC} \right]$	

Independent Memory

- To perform each of the following memory operation, press **A** to shift the keypad ("**S**" indicator appears on display), and then press **(F/MC)**, **(X/MR)**, **(C/M=)**, or **(+M+)**.
- The "**M**" indicator is shown on the display while there is a value stored in independent memory.

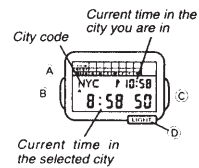
- (-M-)**: Subtracts the displayed value from independent memory.
- (+M+)**: Adds the displayed value to independent memory.
- (C/M=)**: Clears independent memory (The "**M**" indicator disappears).
- (X/MR)**: Recalls the value stored in independent memory.

Example	Operation	Display
80 x 9 = 720	(C) 80 (X/MR) 9 (A) (+M+)	M 720.
-) 50 x 6 = 300	50 (X/MR) 6 (A) (-M-)	M 300.
20 x 3 = 60	20 (X/MR) 3 (A) (+M+)	M 60.
480	(A) (X/MR)	M 480.

To switch the key input tone on and off

In the Calculator Mode, hold down **(C)** for one or two seconds to switch the key input tone on and off. The key input on/off setting you make in the Calculator Mode is applied to all other modes, except the Stopwatch Mode.

WORLD TIME MODE



The World Time Mode shows the current time in 24 time zones around the world. When you set the time for any time zone, all other zones are adjusted accordingly.

- For full information on city codes, see the City Code Table at the end of this page.

The left figure displays the current time in New York whose city code is 'NYC'.

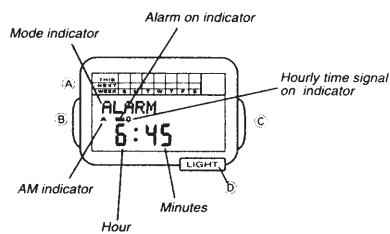
To set the World Time

- In the World Time Mode, press **(+M+)** or **(-M-)** to scroll through the World Time Zones. Display the Time Zone whose time you want to set.
- Hold down **A** to make the cursor appear on the display.
- Press **B** or **D** to move the cursor between the hour and minutes settings.
- While the cursor is located at the hour and minutes digits, use the key pad to input the World Time setting.
 - The 12-hour/24-hour format of the World Time matches the format you select in the Timekeeping Mode.
 - If you are using the 12-hour timekeeping format, the **A** (AM) or **P** (PM) indicator flashes along with the hour digit. Press **(PM)** to switch between AM and PM.
 - The seconds count of the World Time is synchronized with the seconds count in the Timekeeping Mode.
- After you finish setting the time, use **(A)** to return to the normal World Time Mode (The digits stop flashing).
- If you do not operate any button for a few minutes while the cursor is flashing on the display, the watch automatically goes back to the normal World Time Mode.

To switch the World Time Mode between standard time and daylight saving time

- In the World Time Mode, use **(+M+)** or **(-M-)** to display the time zone you want.
- Hold down **(C)** to switch between standard time and daylight saving time.
 - The indicator "**♦**" is shown on the display whenever daylight saving time is set.
 - Note that the daylight saving time/standard time setting affects only the currently displayed time zone. Other zones are not affected.

ALARM MODE



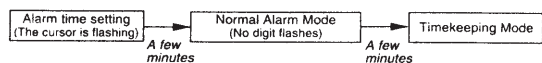
When the Daily Alarm is switched on, an alarm sounds for 20 seconds at the preset time each day. Press any button to stop the alarm after it starts to sound.

When the Hourly Time Signal is switched on, the watch beeps every hour on the hour.

To set the alarm time

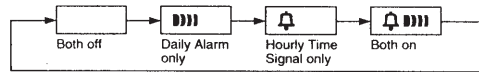
- While in the Alarm Mode, press **(A)** and a cursor starts to flash on the display.
- Use the key pad to input the alarm time.
 - The cursor automatically moves to the right each time you input a number. You can also use **(B)** and **(D)** to move the cursor between the hour and minutes settings.
 - The 12-hour/24-hour format of the alarm time matches the format you select in the Timekeeping Mode.
 - If you are using the 12-hour timekeeping format, the **A** (AM) or **P** (PM) indicator flashes along with the hour digit. Press **(PM)** to switch between AM and PM.
 - When setting the alarm using 12-hour format, make sure that you set the time correctly as AM (A) or PM (P).
- After you set the alarm time, press **(A)** to return to the normal Alarm Mode. At this time, the alarm on indicator (see the above figure) appears on the display indicating that the Daily Alarm is switched on.

The following shows how the display automatically changes if you do not operate any button for a few minutes while in the Alarm Mode.



To switch the Daily Alarm and Hourly Time Signal on and off

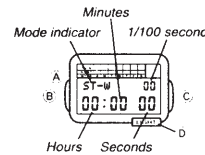
Press **(C)** while in the Alarm Mode to change the status of the Daily Alarm and Hourly Time Signal in the following sequence.



To test the alarm

Hold down **(C)** while in the normal Alarm Mode to sound the alarm.

STOPWATCH MODE



The Stopwatch Mode lets you measure elapsed time and split times. The range of the stopwatch is 23 hours, 59 minutes, 59.99 seconds.

Use **(B)** button to enter the Stopwatch Mode before you perform the following operation.

To measure elapsed time

- Press **(C)** to start the stopwatch.
- Press **(C)** to stop the stopwatch.
 - You can resume the measurement operation by pressing **(C)** again.
- Press **(A)** to clear the stopwatch to all zeros.

To record split times

- Press **(C)** to start the stopwatch.
- Press **(A)** to display the timing up to that point. At this time, "SPLIT" is shown on the display and the stopwatch timing continues internally.
- Press **(A)** to clear the split time and to continue time measurement on the display.
 - You can repeat steps 2 and 3 as many times as you want.
- Press **(C)** to stop the time measurement.
- Press **(A)** to clear the stopwatch to all zeros.

To time first and second place finishes

- Press **(C)** to start the stopwatch.
- Press **(A)** when the first finisher crosses the line, and record the time.
- Press **(C)** when the second finisher crosses the line.
- Press **(A)** to display the finishing time of the second finisher.
- Press **(A)** again to clear the stopwatch to all zeros.

CITY CODE TABLE

Difference between GMT	City code	City	Other major city in same time zone
-11	---	---	PAGO PAGO
-10	HNL	HONOLULU	PAPEETE
-09	ANC	ANCHORAGE	NOME
-08	LAX	LOS ANGELES	SAN FRANCISCO, LAS VEGAS, VANCOUVER, SEATTLE, DAWSON CITY
-07	DEN	DENVER	EL PASO, EDMONTON
-06	CHI	CHICAGO	HOUSTON DALLAS, NEW ORLEANS, MEXICO CITY, WINNIPEG, FORT WORTH
-05	NYC	NEW YORK	MONTREAL, DETROIT, MIAMI, BOSTON, PANAMA CITY, HAVANA, LIMA, BOGOTA
-04	CCS	CARACAS	LA PAZ, SANTIAGO, PORT OF SPAIN
-03	RIO	RIO DE JANEIRO	SAO PAULO, BUENOS AIRES, BRASILIA, MONTEVIDEO
-02	---	---	---
-01	---	---	AZORES, PRAIA
+00	LON	LONDON	DUBLIN, CASABLANCA, DAKAR, ABIDJAN
+01	PAR	PARIS	MILAN, ROME, MADRID, AMSTERDAM, ALGIERS, HAMBURG, FRANKFURT, VIENNA, STOCKHOLM, BERLIN, LISBON
+02	CAI	CAIRO	ATHENS, HELSINKI, ISTANBUL, BEIRUT, DAMASCUS, JRS
+03	JED	JEDDAH	CAPE TOWN
+04	DXB	DUBAI	KUWAIT, RIYADH, ADEN, ADDIS ABABA, NAIROBI
+05	KHI	KARACHI	ABU DHABI, MUSCAT
+06	DAC	DHAKA	---
+07	BKK	BANGKOK	JAKARTA, PHNOM-PENH, HANOI, VIENTIANE
+08	HKG	HONG KONG	SINGAPORE, KUALA LUMPUR, BEIJING, TAIPEI, MANILA, PERTH, LAN BATOR
+09	TYO	TOKYO	SEOUL, PYONGYANG
+10	SYD	SYDNEY	MELBOURNE, GUAM, RABAU
+11	NOU	NOUMEA	PORT VILA
+12	WLG	WELLINGTON	CHRISTCHURCH, SUVA, NAURU ISLAND