


Procedure Lookup
The following is a handy reference list of all the operational procedures contained in this manual.
To set the time and date ............................................................................................ E-7
To toggle the Timekeeping Mode time between DST and Standard Time ......... E-9
To toggle between 12-hour and 24-hour timekeeping ...................................... E-10
To measure times with the stopwatch..........................................................................12
To set the event time......................................................................................... E-14
To start timing at the beginning of an event..................................................... E-14
To pause timing
To reset elapsed time measurement to zero...................................................... E-15
To perform a preset timer operation....................................................................................................-17
To configure countdown timer settings .............................................................. E-21
To perform a countdown timer operation ......................................................... E-24

To view the time for another city code.............................................................. E-26
To toggle a city code time
between Standard Time and Daylight Saving Time....................................... E-27
To set the alarm time......................................................................................... E-28

To switch the Daily Alarm and Hourly Time Signal on and off .............................................................
To test the alarm................................................................................................ E-30
To illuminate the display.................................................................................... E-31
To turn the button operation tone on and off................................................. E-34

## General Guide

- Press (C) to change from mode to mode.
- In any mode (except when a setting screen is on the display), press (B) to illuminate the display.


E-4

Timekeeping


E-6

To set the time and date


1. In the Timekeeping Mode, hold down (A) until the seconds start to flash, which indicates the setting screen.
2. Press (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 (D) and (B) to change it as

| Screen | To do this: | Do this: |
| :---: | :---: | :---: |
| 50 | Reset the seconds to 00 | Press (D). |
| 0 FF | Toggle between Daylight Saving Time (if $\boldsymbol{f}$ ) and Standard Time ( $\boldsymbol{G}$ FF) |  |
| TYO | Change the city code | Use (D) (east) and (B) (west). |
| - 10:58 | Change the hour or minutes | Use (D) (+) and (B) (-). |
| 314 | Change the year |  |
| 6.30 | Change the month or day |  |

- See "Daylight Saving Time (DST)" on page E-9 for details about the DST setting. 4. Press (A) to exit the setting screen.

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.
To toggle the Timekeeping Mode time between DST and Standard Time 1. In the Timekeeping Mode, hold down (A) until the seconds start to flash, which indicates the setting screen.
2. Press (©) to display the DST setting screen.
3. Press (D) to toggle between Daylight Saving Time (of displayed) and Standard Time (off displayed).

- The DST indicator is on the display while Daylight Saving Time is turned on.

To toggle between 12-hour and 24-hour timekeeping
In the Timekeeping Mode, press (D) to toggle between 12-hour timekeeping and 24-hour timekeeping.
With the 12-hour format, the $\mathbf{P}$ (PM) indicator appears for times in the range of noon to $11: 59 \mathrm{p} . \mathrm{m}$. and no indicator appears to the left of the hour digits 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.

- The 12 -hour/24-hour timekeeping format you select in the Timekeeping Mode is
applied in all other modes.
-The $\mathbf{P}$ indicator is not displayed with the Timekeeping Mode time on the Preset Timer Mode, Countdown Timer Mode, World Time Mode, and Alarm Mode screens.


## Stopwatch



The stopwatch lets you measure elapsed time. The upper display and lower display can be used for official timing of an event or game.

- The measurement rang
59 minutes 59 seconds.
- The measurement range
- The stopwatch continues to run, restarting from zero after
it reaches its limit, until you stop it.
- 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) (page E-4).


To measure times with the stopwatch Elapsed Time

| (D) | (D) | (D) | Resume |
| :--- | :--- | :--- | :--- |
| Start | Stop*1 | Rep*1 | Hold down (A) <br> Reset |

*1 Elapsed time measurement in the lower display continues.
E-12

Using the Watch for Official Timing of a Sport Event
After you set a game or event time, the watch will sound an alarm when the time in the lower display reaches that time.
If the event is interrupted for some reason, you can press (D) to pause and resume timing in the upper display. The lower display shows the total elapsed time since the start of the timing operation. You can calculate the total amount of time that play was interrupted (lost time or injury time) by subtracting the upper display time from the lower display time.

To set the event time


1. In the Stopwatch Mode, hold down (A) until the curren event time setting starts to flash in the lower display. This is the setting screen.

- If the current event time is not displayed, use the procedure under "To reset elapsed time measurement to zero" (page E-15) to display it
. While a setting is flashing, use (D) $(+)$ and (B) $(-)$ to
You can it.
60 minutes the event time in the range of 1 minute to
60 minutes, in 1 -minute units.

3. Press (A) to ext there is no event time set.
eginning of an event
When the current time in the lower display reaches the event start time, press (D) to start timing.

- This will display elapsed time measurement in the upper and lower displays. E-14


## To pause timing

1. Press (D)

This stops elapsed time measurement in the upper display.
2. To resume elapsed time measurement in the upper display, press (D) again.

When the preset event time is reached

- The watch will sound an alarm when the elapsed time measurement in the lower
display (total elapsed time since timing started) reaches the preset event time.
- Elapsed time measurement continues to be performed even after the preset event time is reached.

To reset elapsed time measurement to zero

1. Press (D). This stops elapsed time measurement in the upper display. - Elapsed time measurement in the lower display continues. 2. Hold down (A) until the initial Stopwatch Mode screen appears.

Preset Timer


The watch includes a number of different preset times that you can select for the countdown start time.
An alarm sounds when the countdown reaches zero.
The following are the preset start times, all in minutes:
You $12,20,25,30,35,40,45$
, restarts from the preset start time you selected, whenever

- All of the operations in this section are performed in the Preset Timer Mode, which you enter by pressing (C) (page E-4).

To perform a preset timer operation


E-17

- When the end of the countdown is reached, the alarm sounds for 10 seconds or until you stop it by pressing any button.
- When the end of the countdown is reached while auto-repeat is turned off, the watch will go into an elapsed time operation and display how much time has elapsed since the end of the countdown was reached. The elapsed time operation will stop automatically when it reaches 60 minutes. At that time the countdown timer start time selection screen will appear.
- When the end of the countdown is reached while auto-repeat is turned on, a new countdown starts from the selected preset start time. The number of repeats is displayed in the lower display. The number of repeats display changes to "- - " when the count reaches 100 .
- To stop a countdown operation completely, first pause it (by pressing (D), and then press (A). This will display the initial Preset Timer Mode screen.


## Operation Guide 3426

## Countdown Timer



With the countdown timer, you can set up to nine star times, which are counted down in sequence one after the
other.
The co example, three miner can be used for interval training (for with HTE , five minutes running with NTT ) or for timing an multi-period event (for example, 45 minutes of play with MHTI, 15 minutes rest with IHTE, 45 minutes play with (IWTZ). - The watch performs an alert operation (beeper) when any timer reaches zero.

- An alert operation (about one second) is performed when any countdown timer (except for the last one in the
series) reaches zero. When the last countdown timer in the series reaches zero, an alert operation is performed or about five seconds.

You can turn on an auto-repeat feature that restarts the timer sequence from the beginning when the end of the last timer is reached

- All of the operations in this section are performed in the Countdown Timer Mode which you enter by pressing (C) (page E-5)


## To configure countdown timer settings

1. In the Countdown Timer Mode, hold down (A) until the countdown timer number starts to flash
2. Use (D) $(+)$ and $(B)(-)$ to scroll through the countdown timer numbers until the one you want to set is displayed

3. Press (C) to move the flashing in the sequence shown below to select other settings.

4. While a setting is flashing, use (D) and (B) to change it as described below.

| Screen | To do this: | Do this: |
| :---: | :---: | :---: |
| IHT1 | Change the countdown timer number | Use ( ${ }^{\text {( }}(+)$ and (B) ( - ). |
| 300" | Change the minutes (00-59) |  |
|  | Change the seconds (fot-55, 5 -second units) |  |
| $\longrightarrow$ | Toggle auto-repeat on ( $\square$ ) and off ( - ) | Press (D). |

- Any timer whose start time is $060 G$ will not be used during the countdown timer
- There is no auto-repeat for individual countdown timers. In the Countdown Timer Mode, auto-repeat repeats the entire set of timers.
. Set the the of all of the timers thant 6. Press (A) to exit the setting screen.
-When auto-repeat is turned on, the number of repeats will
appear in the lower display.
- Frequent use of auto-repeat and the alarm can run down battery power.


To perform a countdown timer operation
In the Countdown Timer Mode, press (D) to start the countdown of the lowest numbered countdown timer that has a start time setting that is not zero.

- To pause the countdown timer that is currently counting down, press (D). Press (D)
again to resume the countdown.
- During a countdown timer operation, any countdown timer whose start time is zero
$\left(\sigma \theta^{\prime \prime}\right)$ is skipped.

E-24

- The first countdown timer of the series is the lowest numbered one with a start time that is not zero. The final countdown timer of the series is the highest numbered one
- While auto-repeat is turned off, the watch beeps when each countdown timer reaches zero. An alarm will sound for about five seconds when the final countdown timer reaches zero
- While auto-repeat is turned on, the watch beeps once when each countdown timer timer reaches zero, unless the start time of the final countdown timer is countdown or less. In such a case, the alert operation for the final countdown timer is only one second long.
- Timing restarts from the first timer when the final countdown timer reaches zero. The number of repeats is displayed in the lower display. The number of repeats display changes to "--" when the count reaches 100.
- An ongoing countdown timer operation continues to be performed even if you exit the Countdown Timer Mode.
- To stop a countdown timer operation, first press (D) to pause the countdown of the current timer, and then press (A). This will display Countdown Timer 1 (IMTI).

World Time
Timekeeping Mode time


Current time in the zone the selected city code

World Time shows the current time in 48 cities (29 time zones) around the world.

- When you enter the World Time Mode, the data you were viewing when you last exited the mode appears first. All of the operations in this section are performed (page E-5). (page E-5).

To view the time for another city code In the World Time Mode, press (D) to scroll eastward through city codes.

- For full information about city codes, see the "City Code

Table" at the back of this manual.

- If the current time for a city is wrong, check your Timekeeping Mode time and Home city code settings and
make necessary changes.

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

2. Hold down $A$ for to toggle between

Daylight Saving Time (DST displayed) and Standard Time (DST not displayed)

- The DST indicator is on the display whenever you display a city code for which Daylight Saving Time is turned on. the currently displayed city code. Other city codes are not affected.


## Alarm



Alarm time
(Hour: Minutes)
(Hour: Minutes)
2. Press (c) to change the selection in the following sequence.

3. While a setting is flashing, use (D) and (B) to change it as described below.

| Screen | To do this: | Do this: |
| :---: | :--- | :--- |
| $\mathbf{i c}: \mathbb{Z D}$ | Change the hour and minutes | Use ( (D) (+) and (B) (-). <br> - With the 12-hour format, set the time <br> correctly as a.m. or p.m. (P indicator). |

4. After you set the alarm time, press (A) to return to the Alarm Mode.

To stop the alarm tone after it starts to sound
Press any button.

To switch the Daily Alarm and Hourly Time Signal on and off
Press (D) while in the Alarm Mode to change the status of the Daily Alarm and Hourly Time Signal in the following sequence.

(D)

To test the alarm
Hold down (D) while in the Alarm Mode to sound the alarm

Illumination


To illuminate the display
In any mode, press (B) to turn on illumination.

## 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.

## Graphic Areas

The following describes the information indicated by the three graphic areas in each mode.


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, the alarm, the Hourly Time Signal, the countdown timer alarm, and the event time alarm all operate normally.
To turn the button operation tone on and off In any mode (except when a setting screen is on the display), hold down (C) to toggle the button operation tone on ( $\gg$ not displayed) and off ( $\$$ displayed).
- Holding down (C) to turn the button operation tone on or off also causes the watch's current mode to change
- $>$ is displayed in all modes when the button operation tone is turned off.

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 scrolis at high speed. This is true except when the countdown timer number is flashing on the Countdown Timer Mode screen (page E-21).

## Auto Return Features

- If you leave the watch in the Alarm Mode for two or three minutes without performing any operation, it changes to the Timekeeping Mode automatically.
- If you leave a screen with flashing digits on the display for two or three minutes without performing any operation, the watch exits the setting screen automatically.


## Timekeeping

- Resetting the seconds to $\theta 0$ 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 $\theta f$ 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.


## World Time

- The seconds count of the World Time is synchronized with the seconds count of the Timekeeping Mode
- All World Time Mode times are calculated from the current Home City time in the Timekeeping Mode using UTC time differential values.
- The UTC differential is a value that indicates the time difference between a

The letters "UTC" is the abh, Englion for "Universal Zone where a city is located. 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.

## Illumination Precautions

- lllumination loses power after very long use.
- Illumination may be hard to see when viewed under direct sunlight.
- Illumination turns off automatically whenever an alarm sounds.
- Frequent use of illumination runs down the battery.


## Specifications

Accuracy at normal temperature: $\pm 30$ seconds a month
Timekeeping: Hour, minutes, seconds, p.m. (P), month, day, day of the week Time format: 12-hour and 24-hour
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

## Stopwatch

Measuring units: Upper display: 1 second; Lower display: 1 second
Measuring capacities: Upper display: 59'59"; Lower display: 99'59.99"
Measuring modes: Elapsed time, event time
Preset Timer
Measuring unit: 1 second
Preset Start Times: 10, 12, 15, 20, 25, 30, 35, 40, 45 minutes
Timer modes: Elapsed time, Auto-repeat
Measurement of elapsed time for up to 60 minutes after the countdown reaches zero

Countdown Timer
Number of Timers: Up to 9
Input range: 59'55" (1-minute increments and 5-second increments) Other: Auto-repeat timing
World Time: 48 cities ( 29 time zones)
Other: Daylight Saving Time/Standard Time
Alarm: Daily alarm, Hourly time signal
Illumination: LED (light-emitting diode)
Other: Button operation tone on/off
Battery: One lithium battery (Type: CR2025)
Approximately 10 years on type CR2025 (1 stopwatch elapsed time operation per week ( 10 -second alarm when timing reaches preset event time); 1 preset timer operation per week (10-second alarm when countdown reaches zero); 1 countdown zero, 5 -second alarm when last countdown timer reaches zero), daily alarm operation 10 seconds per day, 1.5 seconds of illumination per day)

## Operation Guide 3426

City Code Table


| City Code | City | UTC Differential | Other major cities in same time zone |
| :---: | :---: | :---: | :---: |
| PPG | Pago Pago | -11 |  |
| HNL | Honolulu | -10 | Papeete |
| ANC | Anchorage | -9 | Nome |
| YVR | Vancouver | -8 | Las Vegas, Seattle/Tacoma, Dawson City |
| SFO | San Francisco |  |  |
| LAX | Los Angeles |  |  |
| DEN | Denver | -7 | El Paso, Edmonton |
| MEX | Mexico City | -6 | Winnipeg, Houston, Dallas/Fort Worth, New Orleans |
| CHI | Chicago |  |  |
| MIA | Miami | -5 | Montreal, Detroit, Boston, Panama City, Havana, |
| NYC | New York |  | Lima, Bogota |
| CCS* | Caracas | -4 | La Paz, Santiago, Port Of Spain |
| YYT | St. Johns | -3.5 |  |
| RIO | Rio De Janeiro | -3 | Sao Paulo, Buenos Aires, Brasilia, Montevideo |
| RAI | Praia | -1 |  |


| City Code | City | UTC Differential | Other major cities in same time zone |
| :---: | :---: | :---: | :---: |
| LIS | Lisbon | 0 | Dublin, Casablanca, Dakar, Abidjan |
| LON | London |  |  |
| BCN | Barcelona | +1 | Amsterdam, Algiers, Hamburg, Frankfurt, Vienna, |
| PAR <br> MIL |  |  | Stockholm, Madrid |
| ROM | Rome |  |  |
| BER | Berlin |  |  |
| ATH | Athens | +2 | Helsinki, Beirut, Damascus, Cape Town |
| JNB | Johannesburg |  |  |
| IST | Istanbul |  |  |
| CAI | Cairo |  |  |
| JRS <br> MOW** | Jerusalem |  |  |
| MOW** | Moscow Jeddah | +3 | Kuwait, Riyadh, Aden, Addis Ababa, Nairobi |
| THR | Tehran | +3.5 | Shiraz |

L-2
L-3

| City Code | City | UTC Differential | Other major cities in same time zone |
| :---: | :---: | :---: | :---: |
| DXB | Dubai | +4 | Abu Dhabi, Muscat |
| KBL | Kabul | +4.5 |  |
| KHI | Karachi | +5 |  |
| MLE | Male |  |  |
| DEL | Delhi | +5.5 | Mumbai, Kolkata |
| DAC | Dhaka | +6 | Colombo |
| RGN | Yangon | +6.5 |  |
| BKK | Bangkok | +7 | Jakarta, Phnom Penh, Hanoi, Vientiane |
| SIN | Singapore | +8 | Kuala Lumpur, Taipei, Manila, Perth, Ulaanbaatar |
| HKG | Hong Kong |  |  |
| BJS | Beijing |  |  |
| SEL | Seoul | +9 | Pyongyang |
| TYO | Tokyo | +9.5 | Darwin |


| City <br> Code | City | UTC <br> Differential | Other major cities in same time zone |
| :---: | :---: | :---: | :--- |
| GUM | Guam | +10 | Melbourne, Rabaul |
| SYD | Sydney |  |  |
| NOU | Noumea | +11 | Port Vila |
| WLG | Wellington | +12 | Christchurch, Nadi, Nauru Island |

