

# Operation Guide 3229/3421

## About This Manual



- 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 background.
- Button operations are indicated using the letters shown in the illustration.

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## Procedure Lookup

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

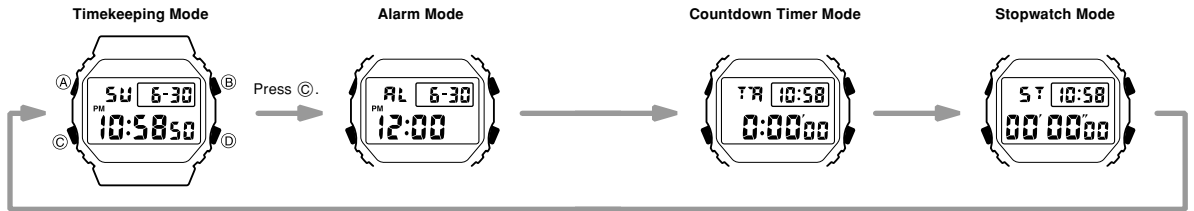
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## General Guide

- Press (C) to change from mode to mode.

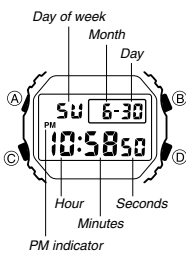
- After you perform an operation in any mode, pressing (C) returns to the Timekeeping Mode.
- Press (D) in any mode to illuminate the display. Illumination turns off about two seconds after you release (D).



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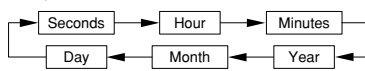
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## Timekeeping



### 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 (C) to change the selection in the following sequence.



- While the seconds digits are selected (flashing), press (B) to reset the seconds to "00". If you press (B) 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 (B) to increase the number. Holding down (B) changes the number at high speed.
  - To switch between the 12-hour and 24-hour formats, press (D) while some digits are flashing.
- 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.
  - The date can be set within the range of January 1, 2000 to December 31, 2099.
  - 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 Timekeeping Mode automatically.

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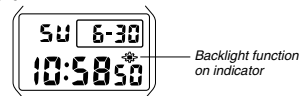
## About the backlight

When you switch the backlight function on, the backlight of the watch flashes whenever alarm (page E-10), countdown timer or hourly time signal is sounding.

- Pressing (D) at any time illuminates the display, regardless of the backlight's on/off setting.
- The backlight of this watch employs an electro-luminescent (EL) light, which loses its illuminating power after very long term use.
- Frequent use of the backlight shortens the battery life.
- The watch will emit an audible sound whenever the display is illuminated. This is caused by a transistor that vibrates when the EL panel lights up. It does not indicate malfunction of the watch.
- The illumination provided by the backlight may be hard to see when viewed under direct sunlight.
- The backlight automatically stops illuminating whenever an alarm sounds.

## To switch the backlight function on and off

In the Timekeeping Mode, hold down (B) for about two seconds to switch the backlight function on and off. When you switch the backlight function on, an indicator appears on the display as shown.

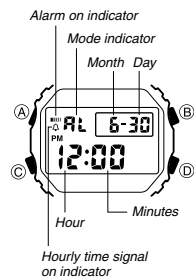


- The backlight function on indicator remains on the display in all modes until you switch the backlight function off.
- The above operation controls operation of the backlight function only. It does not affect operation of audible tones and signals.

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## Alarm



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You can set an alarm with hour, minutes, month, and day. When the alarm is on, the alarm sounds for 20 seconds at the preset time. When the Hourly Time Signal is on, the watch beeps every hour on the hour.

### Alarm Types

The types of alarm you get depends on the information you set.

- **To set a daily alarm**  
Set the hour and minutes for the alarm time. Set "--" for the month and "--" for the day (see step 3 under "To set the alarm time"). This type of setting causes the alarm to sound every day at the time you set.
- **To set a date alarm**  
Set the month, day, hour and minutes for the alarm time. This type of setting causes the alarm to sound at the specific time, on the specific date you set.

### To set a 1-month alarm

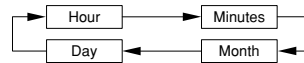
Set the month, hour and minutes for the alarm time. Set "--" for the day (see step 3 under "To set the alarm time"). This type of setting causes the alarm to sound every day at the time you set, only during the month you set.

### To set a monthly alarm

Set the day, hour and minutes for the alarm time. Set "--" for the month (see step 3 under "To set the alarm time"). This type of setting causes the alarm to sound every month at the time you set, on the day you set.

### To set the alarm time

1. Press (A) while in the Alarm Mode until the hour digits start to flash on the display. The hour digits flash because they are selected.
  - At this time, the alarm is automatically switched on.
2. Press (C) to change the selection in the following sequence.



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3. Press (B) to increase the selected digits. Holding down (B) changes the number at high speed.
  - The format (12-hour and 24-hour) of the alarm time matches the format you select for normal timekeeping.
  - When setting the alarm time using the 12-hour format, take care to set the time correctly as morning or afternoon.
4. After you set the alarm time, press (A) to return to the Alarm Mode.
  - 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 Alarm Mode automatically.

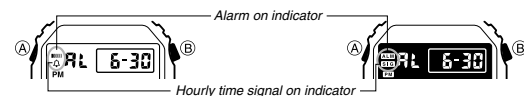
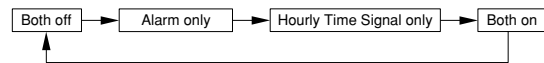
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### To stop the alarm

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

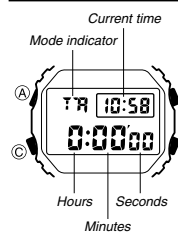
### To switch an alarm and Hourly Time Signal on and off

Press (B) while in the Alarm Mode to change the status of an alarm (see "Alarm Types" on page E-10) and Hourly Time Signal in the following sequence.



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## Countdown Timer

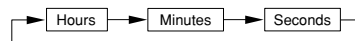


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The countdown timer can be set within a range of 1 second to 24 hours. When the countdown reaches zero, an alarm sounds for 10 seconds or until you press any button.

### To set the countdown time

1. Press (A) while in the Countdown Timer Mode. The hours digit flashes on the display because it is selected.
2. Press (C) to change the selection in the following sequence.



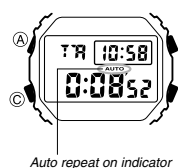
3. Press (B) to increase the selected number. Holding down (B) changes the number at high speed.
4. To set the starting value of the countdown time to 24 hours, set 0:00' 00.
4. After you set the countdown time, press (A) to return to the Countdown Timer Mode.
- If you do not operate any button for a few minutes while a selection is flashing, the flashing stops and the watch goes back to the Countdown Timer Mode automatically.

### To use the countdown timer

1. Press (B) while in the Countdown Timer Mode to start the countdown timer.
2. Press (B) again to stop the countdown timer.
  - You can continue countdown timer operation by pressing (B).
3. Stop the timer and then press (A) until the countdown time is reset to its starting value.
- When the end of the countdown is reached and auto repeat timing is off, the alarm sounds for 10 seconds or until you stop the alarm by pressing any button. Countdown timing stops, and the countdown time is automatically reset to its starting value after the alarm stops.

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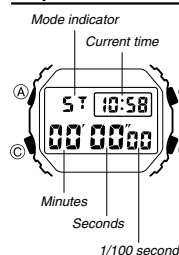
### To switch auto repeat timing on and off



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1. Press (A) while in the Countdown Timer Mode. The hours digit flashes on the display because it is selected.
2. Press (D) to switch auto repeat on and off.
3. Press (A) to return to the Countdown Timer Mode.
  - When the end of the countdown is reached while auto repeat is on, the alarm sounds, but the starting countdown time is reset and countdown timing starts again automatically whenever the countdown reaches zero. You can stop timing by pressing (B), and manually reset to the starting countdown time by pressing (A).

## Stopwatch



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

### To measure elapsed time

1. Press (B) to start the stopwatch.
2. Press (B) to stop the stopwatch.
  - You can resume the measurement operation by pressing (B) again.
3. Press (A) to clear the stopwatch to all zeros.
  - For the first 60 minutes, the display shows minutes, seconds, and 1/100 second. After 60 minutes, the display format changes to show hours, minutes, and seconds.

### To record split times

1. Press (B) to start the stopwatch.
2. Press (A) to display the timing up to that point. Stopwatch timing continues internally.
3. 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.
4. Press (B) to stop the time measurement.
5. Press (A) to clear the stopwatch to all zeros.

### To time first and second place finishes

1. Press (B) to start the stopwatch.
2. Press (A) when the first finisher crosses the line, and record the time.
3. Press (B) when the second finisher crosses the line.
4. Press (A) to display the finishing time of the second finisher.
5. Press (A) again to clear the stopwatch to all zeros.

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## Specifications

- Accuracy at normal temperature:** ±15 seconds a month
- Timekeeping:** Hour, minutes, seconds, pm (PM), month, day, the day of the week  
Time system: Switchable between 12-hour and 24-hour formats  
Calendar system: Auto-calendar pre-programmed from the year 2000 to 2099
- Alarm:** Multi-function alarm, hourly time signal
- Countdown Timer**  
Measuring unit: 1 second  
Input range: from 1 second to 24 hours  
Other: Auto-repeat function
- Stopwatch**  
Measuring units: 1/100 second (for the first 60 minutes)  
1 second (after 60 minutes)  
Measuring capacity: 23 hours, 59 minutes, 59 seconds  
Measuring modes: Elapsed time, split time and two finishes

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**Illumination:** EL (electro-luminescent) backlight

**Battery:** One lithium battery (Type: CR2016)

Approximately 2 years on type CR2016 (Assuming 3.5 seconds light operation and 20 seconds alarm operation per day)

**Note:** Frequent use of the backlight shortens the battery life noted above.