REMARKS ON BATTERIES

**WARNING**

(1) Never attempt to short circuit, dismantle, or heat the alkaline battery, or place it in fire. This may cause a leak of the alkaline solution inside the battery, and if the solution gets into your eyes, it will cause damage. Additionally, the battery may generate intense heat or explode.

(2) If your skin or clothing comes into contact with the alkaline solution, rinse with clean water. If the solution gets into your eyes, rinse eyes with clean water and consult a doctor immediately.

**CAUTION**

(1) Please be aware of the following possible battery usage issues. Misusing batteries may cause leakage or a battery explosion, which may result in a malfunction of the clock or personal injury.

(2) Insert batteries into the battery holders, locating the plus (+) and minus (-) correctly.

(3) If you replace batteries, replace all of them at one time with new cells as specified in this manual.

(4) Batteries used in this clock are not rechargeable. Never attempt to recharge the batteries.

(5) Do not attempt to solder anything directly to batteries.

(6) Do not expose batteries to direct sunlight, heat, or high humidity.

(7) Set the initial batteries in a set of the factory, their actual lives since your possession may be shorter than the specified period.

SPECIFICATIONS

- Manual time setting: Summer time (daylight savings time) is less than 30 minutes (at a normal temperature range between 0°C and 35°C).
- Display shows less than 1 second time gain after receiving radio signal.
- Operational temperature range: Between -10°C and +50°C (the display can be read between 0°C and +40°C).
- Alarm: The electronic beep sound is set at the designated time for approximately 1 minute and automatically stops. After every 5-minute snooze function is equiped (the snooze function can be used repeatedly).
- Automatic calendar: The calendar adjusts automatically for odd and even months including February of leap years from Jan. 1, 2000 to Dec. 31, 2099.
- Temperature scale: Temperature can be measured between 0°C and +40°C (accurate to within ±2°C).
- Time/Calendar display: Hour, minute, second, month, day, week, and year can be displayed simultaneously.
- 12-hour time indication and 24-hour time indication are available.
- Battery: AA battery (alkaline, 6V), 2 pieces.
- Battery life: Approximately 1 year (if the alarm is used for approximately 30 seconds per day).
- Battery life indicator: When batteries are near their end, the battery life indicator marks (2 flashes) appears.
- Time setting by receiving a radio signal: Automatic reception.
- After having received a radio signal, the clock moves according to the quartz movement until the next reception.
- Manual reception (forced reception): Receivable official standard frequency: Japan - JY 40kHz/60kHz The United States - WWVB 60kHz Germany - DCF 77.5kHz The United Kingdom - MSF 60kHz

The specifications are subject to change without notice due to product improvement.

HOW TO USE THE CLOCK

Before using the clock, please peel off the protective film on the display.

- Insert the batteries (2 AAA batteries).
- Open the back cover of the clock and insert the AAA batteries into the battery holder. Be sure to position the plus (+) and minus (-) correctly.
- Press the RESET button.
- The time shows 12:00 AM and the clock starts receiving radio signals.
- Follow the procedure below to select and fix the transmitting station manually.

1. Press the WAVE/SET button to select the transmitting station.
   - With each press of the button, there is a beep and the transmitting station mark starts flashing in the order of 1F8 → 4F8 → 1F8
   - After the transmitting station is selected, the clock receives radio signals transmitted from the selected station only.

2. Set the Time Zone according to the "TIME ZONE ADJUSTMENT" section. The clock completes the signal reception within approximately 30 minutes if the clock successfully receives radio signals. The SIGNAL RECEIVING MARKS (1: receiving strength, 2: receiving station) will appear on the display and the correct time will be displayed.

3. During signal reception, the SIGNAL RECEIVING MARKS change according to the signals received.

   - If the clock fails to receive a radio signal, the bottom of the SIGNAL RECEIVING MARK (1: receiving strength, 2: receiving station) disappears. If such a situation, the time and calendar will not be updated.
   - When the clock is placed where the reception is insufficient to receive radio signals, it will automatically stop searching for radio signals after a few minutes.
   - When sometimes (hour: minutes) and [second] may be displayed correctly during radio signal reception.

After the clock successfully receives radio signals, the other information (month, day) will be displayed correctly.

Note: After the batteries are replaced with new ones, be sure to press the RESET button.

- How to use the alarm

1. Press the UP/DOWN button to set the alarm time.
2. When the UP/DOWN button is pressed, the setting function is activated and the alarm time will be displayed.
3. If the UP/DOWN button is kept pressed, the hour and minute digits advance quickly.
4. If the UP/DOWN button is not pressed for more than approximately 5 seconds, the alarm time is automatically set.
5. Move the ALARM switch to ON. The alarm will ring at the designated time.
6. When the ALARM switch is set to ON, the alarm mark 0 appears.
7. When the ALARM switch is set to OFF, the alarm mark disappears.
8. Push the ALARM switch to OFF. The alarm completely stops.

- The alarm mark 0 disappears.

Press the SNOOZE/UNIT button. The alarm stops temporarily, and after approximately 5 minutes, it will start ringing again (Snooze function). While the snooze function is activated, the alarm mark 0 disappears. The snooze function can be used repeatedly.

- After the alarm rings for approximately 1 minute, it automatically stops (Automatic stop function). The alarm mark 0 remains being displayed, and the alarm will ring again at the same time the next day.

AUTOMATIC SIGNAL RECEPTION

The clock automatically receives a radio signal 6 times a day.

- If the reception is successful, the time and calendar are automatically reset to the current time.

IF THE CLOCK FAILS TO RECEIVE A RADIO SIGNAL

- Perform a manual reception of radio signals to set the time and calendar.

Press the WAVE/SET button. The clock starts receiving radio signals.

- If the clock is unable to receive a radio signal, move it to another place or change the direction of the clock. If the SIGNAL RECEIVING MARKS (1: receiving strength, 2: receiving station) are not displayed during reception attempts, the radio signals may not be sufficient to reach/see where the clock is placed. Since reception conditions are relatively better at night, the clock may be able to receive signals the following day even if the clock has been unable to receive signals during the previous daytime.

- The time and calendar can be set manually.

Press the WAVE/SET button for more than 2 seconds until it stops.

- With each press of the WAVE/SET button, the selected item to be adjusted flashes in the order as shown in the figure below.

- Press the UP/DOWN button to set each item.

- If the UP/DOWN button is not pressed for more than approximately 5 minutes, the display automatically returns to the NORMAL display. The time and calendar shows just before returning to the NORMAL display will be displayed.

- [Normal display]

  - Generally use the clock with the NORMAL display.

  - [Year Setting display]

    Press the UP/DOWN button to set the year. The year can be selected from 2006 to 2099.

    - The day will be automatically adjusted.

  - [Month/Date Setting display]

    Press the UP/DOWN button to set the month and date.

    - The day will be automatically adjusted.

  - [Month/Date Format Setting display]

    Press the UP/DOWN button to toggle between Month/Date or Date/Month calendar display.

  - [Time Setting display]

    Press the UP/DOWN button to set the hour and minute digits. When the UP/DOWN button is pressed, the digits advance quickly.

  - [Daylight Saving Time Setting display]

    Press the UP/DOWN button to set the Daylight Saving Time setting. Please refer to the "Time Zone Adjustment" and "Daylight Saving Time Adjustment" sections of this instruction manual.

  - [Language Setting display]

    Press the UP/DOWN button to select the language from English (EN) / Dutch (NL) / Spanish (ES) / Italian (IT) / French (FR) / German (DE)

  - [24/12 Hour Indication Setting display]

    Press the UP/DOWN button to select either the 12-hour or 24-hour indication.

- After setting the 12-hour or 24-hour indication, press the WAVE/SET button to return to NORMAL display.

DAYLIGHT SAVING TIME ADJUSTMENT

- The Automatic Daylight Saving Time (DST) is turned on after successful reception of Germany or United Kingdom signal, and then turned off after successful reception of Japan signal.

While in the "Daylight Saving Time Setting display", the second digits are selected, press the UP/DOWN button to select Automatic DST ON or OFF.

TIME ZONE ADJUSTMENT

- The clock can be set to a local time in a time zone different from a standard time.

- While in the "Daylight Saving Time Setting display", press the UP/DOWN button to change the time zone.

1. If the clock receives the official standard frequency of the United States, the time zones can be selected from the below.

   - Eastern (+2) / Central (-1) / Mountain (0) / Pacific (-8) / Alaska (-3) / Hawaii (+3)/

2. If the clock receives an official standard frequency of an area other than the United States, the clock can be set to zones 1 hour earlier or later than the standard time of the area.

3. For instance, if you want to set this in Taiwan after receiving the standard frequency of Japan, you can set the clock to the Taiwan time that is one hour later than the Japan Standard Time.

   - 1: the clock can be set to the time one hour earlier than a standard time.
   - 2: the clock can be set to the time one hour later than a standard time.

LIGHT

- If the SNOOZE LIGHT button is pressed, the lights comes on. After the button is released, the light remains lit for about 4 seconds.

BATTERY LIFE INDICATOR

This clock is equipped with a battery life indicator. When batteries are near their end, the battery life indicator mark 0 flashes. When this happens, replace the batteries with new ones.

HOW TO SHOW TEMPERATURE DISPLAY

- Press the Temperature / Day of the week button to select between Day-of-the-Week and Temperature display.

- Press the Temperature °C / °F button to select the display format of temperature between the two measure systems below.

  - °C: Centigrade
  - °F: Fahrenheit

NOTES

- The clock is equipped with a microcomputer. Defective indication may be caused by interference from static electricity, etc.; however, this is not a malfunction of the clock.

- When the RESET button is pressed, time and all other functions are reset.

- After replacing the batteries with new ones, be sure to press the RESET button.