

Instruction Manual

LORUS

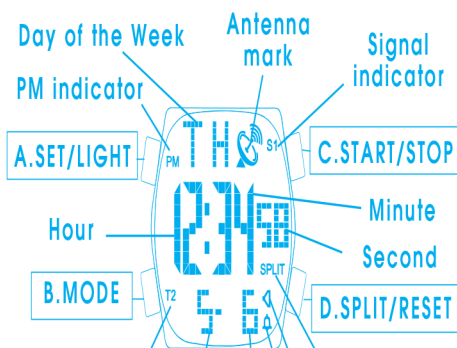
CAL. YK60 (R23 SERIES) Radio-controlled watch

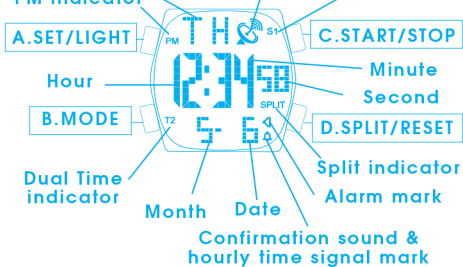
LORUS

■ CHARACTERISTICS

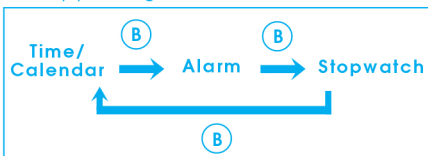
- 1. Time/Calendar Display:** Hour, minute, second, month, date and day of the week
- 2. Automatic Calendar:** The calendar adjusts automatically for odd and even months including February of leap years from Jan. 1, 2000 to Dec. 31, 2099.
- 3. Time Display Format:** 12-hour display format with PM indicator and 24-hour display format are available.
- 4. Dual Time:** Time in a different time zone can be set and displayed.
- 5. Stopwatch:** Measures up to 99 hours 59 minutes 59.99 seconds in 1/100-second increments. Split time measurement is also available.
- 6. Alarm:** The alarm can be set to sound on a 24-hour basis. Five individual daily alarms can be set.
- 7. Hourly time signal:** can be set to ring every hour on the hour with a single beep.
Confirmation sound: can be set to ring when a button is pressed to operate the watch.
- 8. Automatic Time Setting:** The watch can maintain precise time by automatically receiving a radio signal which broadcasts the official time standard once a day. A radio signal can be selected between MSF and DCF77. MSF is the radio signal for broadcasting the official time standard for the United Kingdom, and DCF77 is for Germany.
- 9. Illuminating light:** The built-in electroluminescent backlight illuminates the display for viewing in the dark.

■ BUTTONS AND DISPLAYS



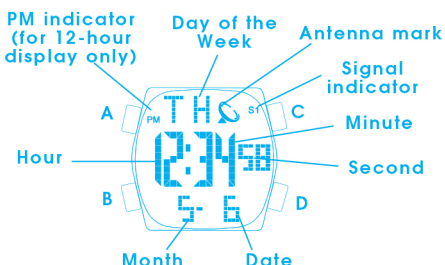


The display mode changes over in the following order by pressing button B.



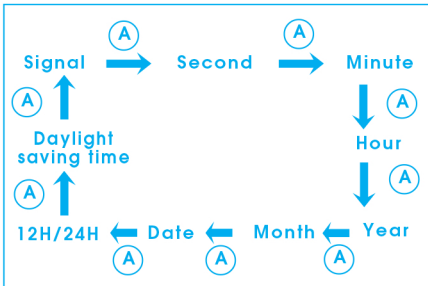
* After the alarm is adjusted, the watch will return to the Time/Calendar display when button B is pressed.

■ HOW TO SET THE TIME/CALENDAR



1. Press button A for more than 2 seconds to go to the Time/Calendar Setting Mode. The signal selection digit starts flashing.
2. Press button C or D to select a signal. With each press of the button, S1 (MSF) or S2 (DCF) is selected.
3. Press button A to confirm the signal setting and move on to the second setting. The second digits start flashing.
4. Press button C or D in accordance with a time signal to adjust the second digits. The second digits are reset to "00" and start immediately.
When button C or D is pressed while the second digits are between "30" to "59," one minute is added at the same time the second digits are reset to "00."
5. Press button A to confirm the second setting and move on to the minute setting. The minute digits start flashing.
6. Adjust the minute digits and other items. Press button C or D to adjust an item, and then press button A to confirm it's setting and move on to the next item.
With each press of button C, one digit is increased, and with each press of button D, one digit is decreased. To move the digits quickly, keep the button pressed.

- The item to be adjusted changes over in the following order.



7. After all the adjustments are completed, press button B to return to the Time/Calendar Display.

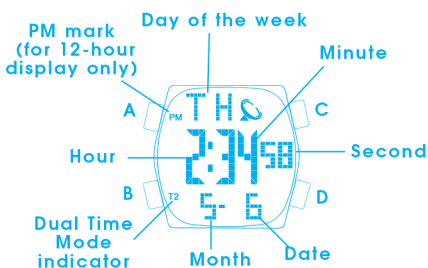
* If the watch is left untouched in the Time/Calendar Setting mode, it will automatically return to the Time/Calendar display in 2 to 3 minutes.

Choice of 12-Hour/24-Hour indication

- The time display format in either 12-hour indication or in 24-hour indication can be selected alternatively by pressing button C or D. Under the 12-hour indication format, "PM" mark appears in the afternoon, but no AM mark appears in the morning. Under the 24-hour indication format, no mark appears on the display.

■ HOW TO SET THE DUAL TIME

- Time in a different time zone can be displayed.



1. Press button C in the Time/Calendar display to go to the Dual Time mode. Mode indicator "T2" appears.
2. Press button A for more than 2 seconds to go to the Dual Time Setting mode. The hour digits start flashing.
3. Press button C or D to adjust the hour digits. With each press of button C, one digit is increased, and with each press of button D, one digit is decreased. To move the digits quickly, keep the button pressed. Press button A or B to confirm the hour setting. The watch will directly return to the Dual Time mode.
4. Press button C to go back to the Time/Calendar display.

* If the watch is left untouched in the Dual Time Setting mode, it will automatically return to the Dual Time mode in 2 to 3 minutes.

Note: If the 12-hour Indication format is selected in the Time/Calendar mode, make sure that AM or PM is correctly set when setting the hour digits in the Dual Time mode. Under the 12-hour indication format, "PM" mark appears in the afternoon, but no AM mark appears in the morning.

■ HOW TO SET THE ALARM

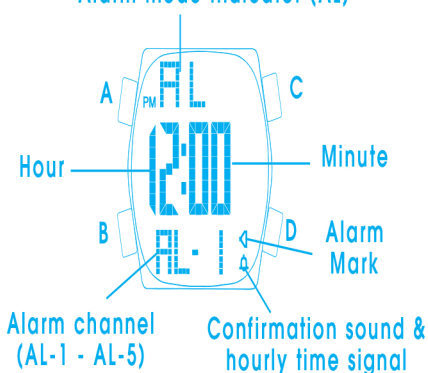
- Five daily alarms (AL-1 - AL-5) work independently. Each alarm can be set only

Time mode. Under the 12-hour indication format, "PM" mark appears in the afternoon, but no AM mark appears in the morning.

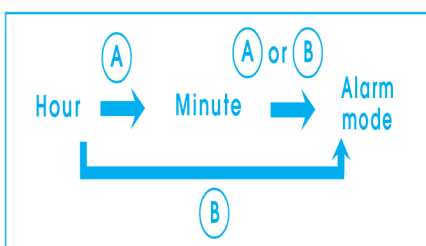
■ HOW TO SET THE ALARM

- Five daily alarms (AL-1 - AL-5) work independently. Each alarm can be set only to the time of the Time/Calendar display.

Alarm mode Indicator (AL)



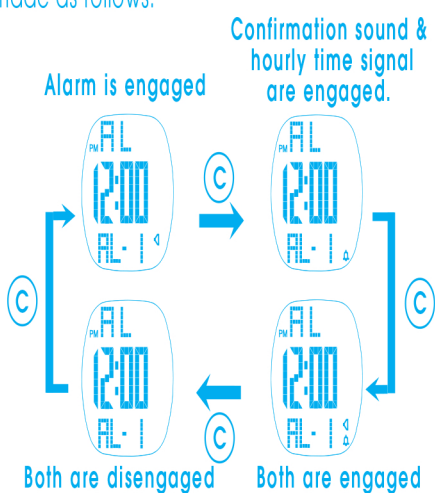
1. Press button B in the Time/Calendar or Dual Time display to go to the Alarm mode. Mode indicator "AL" appears.
2. Press button D to select an alarm channel from among 5 alarm channels (AL-1, AL-2, AL-3, AL-4, and AL-5).
3. Press button A for more than 2 seconds to go to the Alarm Setting mode. The hour digits start flashing.
4. Press button C or D to adjust the hour digits. With each press of button C, one digit is increased, and with each press of button D, one digit is decreased. To move the digits quickly, keep the button pressed.
5. Press button A to confirm the hour setting and move on to the minute setting.
- * If button B is pressed after adjusting the hour digits, the hour setting is confirmed and the watch will directly return to the Alarm mode.
6. Press button C or D to adjust the minute digits, and press button A or B to confirm its setting. The watch will directly return to the Alarm mode.
7. To set the next alarm channel, press button D to select the channel. Press button A for more than 2 seconds to go to the Alarm Setting mode. Adjust the hour and minute digits in the same way as Step 4, 5, and 6.
- The item to be adjusted is shown in the following order with each press of button A or B.



8. After all the adjustments are completed, press button B to return to the Time/Calendar display.
- * If the watch is left untouched in the Alarm Setting mode, it will automatically return to the Alarm mode in 2 to 3 minutes.

Engagement/disengagement of Alarm, and Confirmation sound & hourly time signal

The alarm is automatically engaged when the display is changed to the Alarm Setting mode. When the alarm is engaged, the alarm mark appears on the Alarm time display and also on the Time/Calendar, Dual Time (T2), or Stopwatch display. In order to engage or disengage the alarm, and confirmation sound & hourly time signal, press button C in the Alarm Mode. The engagement or disengagement of the alarm and confirmation sound & hourly time signal are made as follows:



- * When the confirmation sound & hourly time signal are engaged, the confirmation sound & hourly time signal mark appears on the Alarm time display and also on the Time/Calendar, Dual Time (T2), or Stopwatch display.

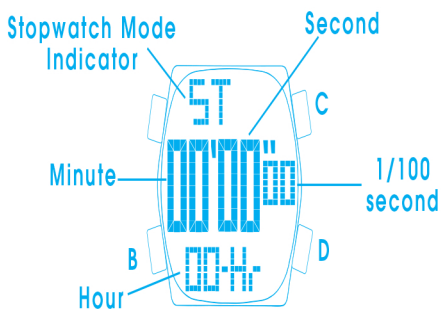
How to stop the alarm while sounding

The alarm sounds for 30 seconds at the designated time. Press any button to stop it manually.

- * When the 24-hour Indication format is selected in Time/Calendar mode, no "PM" mark appears on the Alarm time display.

HOW TO USE THE STOPWATCH

The stopwatch can measure up to 99 hours 59 minutes and 59.99 seconds. When the measurement is over 99 hours 59 minutes and 59.99 seconds, the stopwatch stops automatically.



Stopwatch operation

Press button B to go to the Stopwatch Mode. Mode indicator "ST" appears.

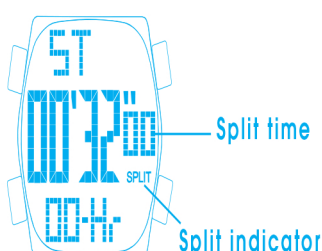
Standard Measurement

1. Press button C to start the stopwatch.
2. Press button C to stop.
3. Press button D to reset the stopwatch.

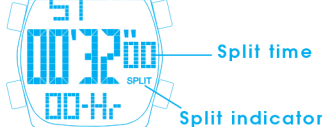


Split Time Measurement

1. Press button C to start the stopwatch.
2. Press button D during the measurement to display the split time. Split time indicator and split time will appear.



3. Press button D to take the next split time.



3. Press button D to take the next split time.
4. Press button C to stop the stopwatch.
5. Press button D to reset.



- * The split time can be measured repeatedly by pressing button D.
6. Press button B to go back to the Time/Calendar display.

■ AUTOMATIC TIME SETTING

The watch can maintain precise time by automatically receiving a radio signal which broadcasts the official time standard once a day. A radio signal can be selected between MSF and DCF77.

- * MSF is the radio signal for broadcasting the official time standard for the United Kingdom, and DCF77 is for Germany. The watch can receive MSF when it is placed within approximately 800 km from the MSF transmitter, and can similarly receive DCF77 when it is placed within approximately 1,000 km from the DCF77 transmitter, depending on conditions.

Automatic reception

The watch receives the selected radio signal automatically to set the time. The signal can be selected between MSF and DCF77 in the Time/Calendar setting mode (Refer to "■ HOW TO SET THE TIME/CALENDAR"). Once the watch starts receiving the radio signal, it will take about 5 minutes until the reception attempt is completed. When the watch successfully receives the signal, or if it fails to receive the signal in about 5 minutes, the watch will return to the Time/Calendar display.

- * Turn the antenna of the watch (at the 12 o'clock position) toward the direction of the transmitter of the selected signal to facilitate signal reception.
- * Leave the watch where it can receive radio signals during the automatic reception period (starting from 3:00 AM, or starting again from 4:00 AM if the reception from 3:00 AM is not successful).
- * The watch receives radio signals in the same way as a TV or radio. Keep the watch where it can easily receive signals, for instance, close to a window. Keep the watch away from objects that cause radio static.
- * Please note that the watch may be unable to receive radio signals properly under the following conditions.
 - a) Inside a building, between tall buildings, underground
 - b) Close to overhead power lines, TV stations, train cables
 - c) Close to home electrical appliances or OA devices such as TV's, refrigerators, air conditioners, air cleaners, PC's, fax machines
 - d) In places generating radio interference, such as construction sites, airports, military bases or in heavy traffic
 - e) Inside a vehicle, train, or airplane
 - f) Close to furniture made of steel, such as a steel desk

Checking the receiving condition during reception

Look at the antenna mark to check receiving conditions during radio signal reception. If the mark is turning with parabolas, a radio signal is being successfully received. If parabolas appear, but soon disappear, receiving conditions are not sufficient for successful reception. If no parabola appears, receiving conditions are poor, or the watch is outside the reception range, and the watch is unable to receive the radio signal.

Checking the reception result

Look at the antenna mark in the Time/Calendar display to check the reception result.

Reception successful (The watch was able to receive a signal within the last 24 hours.)



Reception within last 24 hours failed (The watch has failed to receive a signal within the last 24 hours, but succeeded in receiving a signal during the last 5 straight days.)



Reception failed (The watch has failed to receive a signal for 5 straight days.)



Manual reception

If the watch fails to receive radio signals, conduct manual reception.

1. Press button D in the Time/Calendar display for more than 2 seconds. The watch starts receiving the radio signal.
2. After the watch succeeds in receiving a radio signal, or if it fails to receive a signal in about 5 minutes, it will return to the Time/Calendar display.

- * To return to the Time/Calendar display manually, press any of the buttons.

■ HOW TO RESET THE WATCH

1. Press buttons A, B, C, and D simultaneously in any display mode for 1 second to reset the watch. All indicators appear on the watch display and all digits are reset to "8".



When the buttons are released, the watch starts receiving a radio signal.

- * In such a case, the watch will start receiving MSF and S1 is shown on the display.
2. After the watch succeeds in receiving a radio signal, or if it fails to receive a signal in about 5 minutes, it will return to the Time/Calendar display.
- * To return to the Time/Calendar display manually, press any of the buttons.

■ ILLUMINATING LIGHT

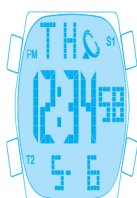
To turn the backlight on, press button A in any

radio signal, or if it fails to receive a signal in about 5 minutes, it will return to the Time/Calendar display.

- * To return to the Time/Calendar display manually, press any of the buttons.

■ ILLUMINATING LIGHT

To turn the backlight on, press button A in any mode. The electroluminescent backlight illuminates the display for 3 seconds and turns off automatically.



■ BATTERY CHANGE

The miniature lithium battery SONY, Maxell or Panasonic CR2025, which powers your watch, should last approximately 2 years. However, because it is inserted at the factory, the actual life of the battery once in your possession may be less than 2 years. Be sure to replace the battery to prevent any possible malfunction as soon as it runs down. To replace the battery, we recommend taking the watch to a local watch repair shop.

■ CARE OF YOUR LORUS WATCH

This watch contains precise electronic components. Never attempt to open the case or remove the back cover.

• BATTERY



CAUTION

Do not expose the old battery to fire or recharge it. Keep it at a place beyond the reach of children. If a child swallows it, consult a doctor immediately.

Caution:

Leather straps are not water resistant except so indicated, even if the watch head is water resistant.

• ALLERGIC REACTION

Because the case and band touch the skin directly, it is important to clean them regularly. If not, shirt sleeves may be stained and those with delicate skin may develop a rash. Please wear the watch with some play to avoid any possible allergic reaction. If you develop a rash on your wrist, stop wearing and consult a physician.

• MAGNETISM/STATIC ELECTRICITY

Your watch will not be affected by magnetism generated by household electric appliances but keep your watch away from a place where the watch is subject to strong electric field and static electricity.

• SHOCKS AND VIBRATIONS

Your watch may be worn for normal sports activities, However, be careful not to drop it or hit it on hard surfaces and avoid any severe impacts.

• TEMPERATURE

Your watch works with stable accuracy within a temperature range between 0°C and 50 °C. Do not expose the watch to a place exceeding this temperature range.

• CLEANING

Use only a soft cloth and clean water for cleaning your watch. Never use chemicals, especially soap.

■ SERVICE

When your LORUS watch requires repair or servicing, please see the enclosed WARRANTY/GUARANTEE.