

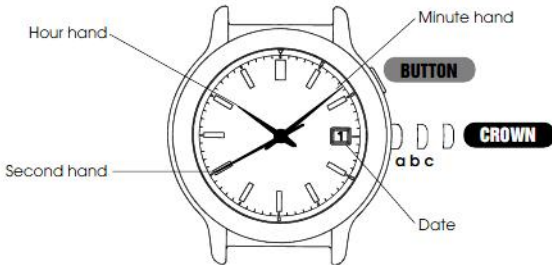
# PULSAR

## CAL. 3M22

### KINETIC®

- KINETIC E. S. U. (Electricity Storage Unit)
- Power reserve indicator
- Energy depletion forewarning function
- Instant-start function
- Time and date calendar
- Rotating bezel  
(only for models with rotating bezel)

## DISPLAY AND CROWN/BUTTON



a: Normal position

b: First click

c: Second click

## SCREW DOWN CROWN

[for models with screw down crown]

### Unlocking the crown

- 1 Turn Crown counterclockwise until you no longer feel the threads turning.
- 2 Crown can be pulled out.



### Locking the crown

- 1 Push Crown back in to normal position.
- 2 Turn Crown clockwise while pressing it lightly until tight.



## HOW TO CHARGE AND START THE WATCH



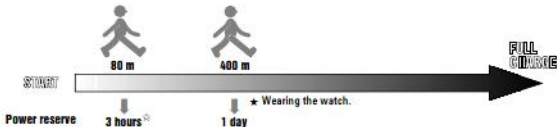
- 1** Swing the watch from side to side.

*\* Swing rhythmically at a rate of twice a second.*



- 2** Charge the KINETIC E. S. U. sufficiently.
- 3** Set the time/calendar and put on the watch.

\* Power reserve accumulated while you are walking



☆ The second hand starts moving at one-second intervals.

☆ The illustration provides only a general guideline of the relationship between the power reserve and the distance you walk. Actual amount of power reserve differs from person to person.

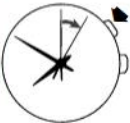

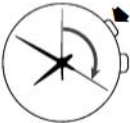
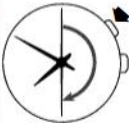
\* Precaution on see-through case-back models

If your watch has a glass case back, do not expose the case back to strong light such as direct sunlight or an incandescent light at close range, as this may temporarily increase the power consumption of the watch circuit, thus reducing the power reserve in the KINETIC E. S. U. This condition, however, will be corrected when the case back is turned away from the light.

## POWER RESERVE INDICATOR

### BUTTON

Press the button at the 2 o'clock position.

★	5 seconds	10 seconds	20 seconds	30 seconds
QUICK MOVEMENT OF SECOND HAND				
POWER RESERVE	Between 3 and 24 hours	Between 1 and 2 days	Between 2 and 3 days	More than 3 days

★ *The second hand will resume normal movement after the indicated 5, 10, 20 or 30 seconds have elapsed.*

## **FULL CHARGE OF THE KINETIC E. S. U.**

- When the KINETIC E. S. U. is fully charged, the watch will keep operating for a maximum of 6 to 7 days without recharging the KINETIC E. S. U.

## **REMARKS ON THE KINETIC E. S. U.**

- Even while the second hand is stopped by pulling out the crown, current continues being consumed by the built-in IC. Therefore, pulling out the crown will not save the energy stored in the KINETIC E. S. U.



### **CAUTION**

- **Never install a silver oxide battery for conventional watches in place of the KINETIC E.S.U. The battery may burst, become very hot or catch fire.**

## ENERGY DEPLETION FOREWARNING FUNCTION

- When the second hand starts moving at two-second intervals instead of the normal one-second intervals, the watch will run down in approximately 3 hours. In this case, swing the watch from side to side to charge the KINETIC E. S. U. sufficiently.

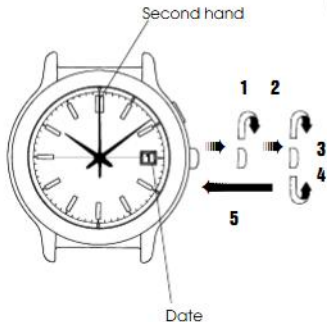
## INSTANT-START FUNCTION

- When a long time has passed since the watch stopped, you can get it started quickly with only a few swings.
- This function is available as long as:
  - 1) the watch previously had more than 2 days of power reserve before it stopped.
  - 2) it has been left untouched for 1 to 4 weeks.

*\* After the watch starts operating, put it on your wrist so that it will be charged further until the second hand moves at one-second intervals.*

## TIME/CALENDAR SETTING

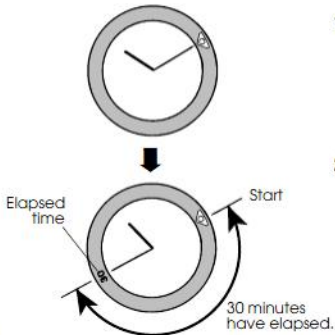
### CROWN



- 1 Pull out to first click and set the previous day's date.
- 2 Pull out to second click when the second hand is at the 12 o'clock position.
- 3 Turn to set the desired date.
- 4 Turn to set the hands to the desired time.
- 5 Push back completely in accordance with a time signal.

## ROTATING BEZEL (for models with rotating bezel)

- The rotating bezel can show up to 60 minutes of elapsed time.



- 1 Turn the rotating bezel to align its "0" mark with the minute hand.

\* For some models, the rotating bezel rotates only counter-clockwise.

- 2 Read the number on the rotating bezel that the minute hand points to.

## **NOTES ON OPERATING THE WATCH**

### **HOW TO CHARGE AND START THE WATCH**

- To charge the KINETIC E. S. U. efficiently, swing the watch from side to side, making an arc of about 20 cm.
- No additional benefit is obtained by swinging the watch more quickly or with greater vigor.
- When the watch is swung, the oscillating weight in the generating system rotates to drive the mechanism. As it rotates, it gives out a sound, which is not a malfunction.
- The watch is equipped with a system to prevent overcharge. Even if it is further swung after being fully charged, no malfunction will result.
- Provided with an instant-start function, the watch may start operating after it is swung several times. For details, see "INSTANT-START FUNCTION".
- Wear the watch daily for at least 10 hours.
- Even if the watch is worn on your arm, it will not be charged while your arm is not in motion.

### **POWER RESERVE INDICATOR**

- The power reserve indicator provides only a general guideline of the duration within which the watch keeps operating without needing to be charged.
- To allow easy reading of the second hand, press the button when the second hand is at the 12 o'clock position.
- You can immediately press the button again to recheck the power reserve one more

time. To do so a third time, however, wait until the second hand resumes normal movement before pressing the button again.

- When the second hand moves at two-second intervals, the power reserve is very low and the indicator does not function.
- Immediately after the watch is swung to charge the KINETIC E. S. U., the second hand may not properly indicate the power reserve. Please check after putting the watch on your wrist.

### **ENERGY DEPLETION FOREWARNING FUNCTION**

- The watch remains accurate even while the second hand is moving at two-second intervals.

### **INSTANT-START FUNCTION**

- If the second hand continues moving at two-second intervals after the watch is put on your wrist, swing it from side to side until the second hand starts moving at one-second intervals, and then, put it on your wrist.

### **TIME/CALENDAR SETTING**

- Do not set the date between 9:00 p.m. and 1:00 a.m. Otherwise, it may not change properly. If it is necessary to set the date during that time period, first change the time to any time outside it, set the date and then reset the correct time.
- When setting the hour hand, check that AM/PM is correctly set. The watch is so designed that the date changes once in 24 hours.

12 Turn the hands past the 12 o'clock marker to determine whether the watch is set for

the A.M. or P.M. period. If the date changes, the time is set for the A.M. period. If the date does not change, the time is set for the P.M. period.

- When setting the minute hand, advance it 4 to 5 minutes ahead of the desired time and then turn it back to the exact minute.
- When setting the time, make sure that the second hand is moving at one-second intervals.
- It is necessary to adjust the date at the end of February and 30-day months.  
In this case, pull out the crown to the first click and turn it until the desired date appears.

## TO PRESERVE THE QUALITY OF YOUR WATCH

### WATER RESISTANCE

#### ● Non-water resistant



- If the watch becomes wet, have it checked by an AUTHORIZED PULSAR DEALER or SERVICE CENTER.

#### ● Water resistant 5/10/15/20 bar



- Before using in water, be sure the crown is pushed in completely.
- Do not operate the crown and button when the watch is wet or in water. If used in sea water, rinse the watch in fresh water and dry it completely.
- When taking a shower with the water resistant 5 bar watch, or taking a bath with the water resistant 10, 15 or 20 bar watch, be sure to observe the following:
  - \* Do not operate the crown or push the button when the watch is wet with soapy water or shampoo.
  - \* If the watch is left in warm water, a slight time loss or gain may be caused. This condition, however, will be corrected when the watch returns to normal temperature.

\* *Pressure in bar is a test pressure and should not be considered as corresponding to actual diving depth since swimming movement tends to increase the pressure at a given depth. Care should also be taken on diving into water.*

\*\* *We recommend that you wear a PULSAR Diver's Watch for scuba diving.*

## TEMPERATURES



Your watch works with stable accuracy within a temperature range of 5° C and 35° C (41° F and 95° F).

Do not leave your watch in very low temperatures below -10° C (+14° F) for a long time since the cold may cause a slight time loss or gain.

However, the above conditions will be corrected when the watch returns to normal temperature.

## MAGNETISM



Your watch will be adversely affected by strong magnetism. Keep it away from close contact with magnetic objects.

## CARE OF CASE AND BRACELET



To prevent possible rusting of the case and bracelet caused by dust, moisture and perspiration, wipe them periodically with a soft dry cloth.

## SHOCKS & VIBRATION



Light activities will not affect your watch, but be careful not to drop your watch or hit it against hard surfaces, as this may cause damage.

## CHEMICALS



Be careful not to expose the watch to solvents, mercury, cosmetic spray, detergents, adhesives or paints. Otherwise, the case, bracelet, etc. may become discolored, deteriorated or damaged.

## PERIODIC CHECK



It is recommended that the watch be checked once every 2 to 3 years. Have your watch checked by an **AUTHORIZED PULSAR DEALER** or **SERVICE CENTER** to ensure that the case, crown, button, gasket and crystal seal remain intact.

## PRECAUTION REGARDING CASE BACK PROTECTIVE FILM



If your watch has a protective film and/or a sticker on the case back, be sure to peel them off before using your watch.