- KINETIC E. S. U. (Electricity Storage Unit)
- Energy depletion forewarning function
- Instant-start function
- Time and date calendar (Cal. YT57)
  Time and day/date calendar (Cal. YT58)
- Rotating bezel
  (only for models with rotating bezel)
DISPLAY AND CROWN

( Cal. YT57 )

- Hour hand
- Minute hand
- Second hand
- Date

(a: Normal position  b: First click  c: Second click)

( Cal. YT58 )

- Hour hand
- Minute hand
- Second hand
- Day and date

(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.
1 When the watch stops completely, a few swings will start the second hand moving at two-second intervals.

2 Swing the watch approximately 100 times. There will be about 12 hours of power reserve available.
   * It is recommended that the watch be swung further until one day of power is reserved. As a guideline of recharging, an additional 200 swings, about 300 swings in total, will reserve one day of power.
   * If the watch is swung 200 to 250 times, about one day of power will be newly accumulated.

3 Wear the watch on your wrist.
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.
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 about 6 months without recharging the KINETIC E. S. U.

REMARKS ON THE KINETIC E. S. U.

- The electric energy generated while the watch is worn on your wrist is stored in the KINETIC E.S.U. It is a power source completely different from conventional batteries for watches, and therefore, this watch does not require battery replacement.
- The KINETIC E.S.U. is a clean and environmentally friendly power source.

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 12 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 the watch has been stopped for less than a year.

* When this function is activated, the second hand will start moving at two-second intervals. Swing the watch from side to side to charge the KINETIC E.S.U. by referring to “Number of swings and power reserve” on page 5.
* After the second hand starts moving at one-second intervals, put the watch on your wrist so that it will be charged further.
(Cal. YT57)

**TIME/CALENDAR SETTING**

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.
1 Pull out to first click and turn clockwise to set the previous day’s date.

2 Turn counterclockwise to set the previous day of the week.

3 Pull out to second click when the second hand is at the 12 o’clock position.

4 Turn to set the desired date and day.

5 Turn to set the hands to the desired time.

6 Push back completely in accordance with a time signal.
The rotating bezel can show up to 60 minutes of elapsed time.

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

   * For some models, the rotating bezel rotates only counterclockwise.

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.
- It is not necessary to charge the watch fully, as it is charged automatically while it is worn on your wrist.
- While you walk with your watch on your wrist, swinging your arm will charge the KINETIC E.S.U. more efficiently than merely swinging the watch by hand.
- Even if the watch is worn on your arm, it will not be charged while your arm is not in motion.
- Wear the watch daily for at least 8 hours.
- If the watch is worn for 12 hours a day, about 36 hours (one and a half days) of power reserve will be newly accumulated every day. If the watch is worn for 12 hours a day over a week, for example, about 10 additional days of power reserve is accumulated.

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

TIME/CALENDAR SETTING

- For Cal. YT57, do not set the date between 9:00 p.m. and 1:00 a.m. For Cal. YT58, do not set the day/date between 9:00 p.m. and 3:00 a.m. Otherwise, the calendar may not change properly. If it is necessary to set the calendar during that time period, first change the time to any time outside it, set the calendar 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 calendar changes once in 24 hours. 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 calendar changes, the time is set for the A.M. period. If the calendar 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 “WATER RESISTANT” is not inscribed on the case back, your watch is not water resistant, and care should be taken not to get it wet as water may damage the movement. If the watch becomes wet, we suggest that you have it checked by an AUTHORIZED PULSAR DEALER or SERVICE CENTER.

● Water resistance (3 bar)
  If “WATER RESISTANT” is inscribed on the case back, your watch is designed and manufactured to withstand up to 3 bar, such as accidental contact with splashes of water or rain, but it is not designed for swimming or diving.

● Water resistance (5 bar)*
  If “WATER RESISTANT 5 BAR” is inscribed on the case back, your watch is designed and manufactured to withstand up to 5 bar and is suitable for swimming, yachting and taking a shower.

● Water resistance (10 bar/15 bar/20 bar)*
  If “WATER RESISTANT 10 BAR”, “WATER RESISTANT 15 BAR” or “WATER RESISTANT 20 BAR” is inscribed on the case back, your watch is designed and manufactured to withstand up to 10 bar/15 bar/20 bar and is suitable for taking a bath, shallow diving, but not for scuba diving. We recommend that you wear a PULSAR Diver’s watch for scuba diving.
* Before using the water resistance 5, 10, 15 or 20 bar watch in water, be sure the crown is pushed in completely. Do not operate the crown 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 resistance 5 bar watch, or taking a bath with the water resistance 10, 15 or 20 bar watch, be sure to observe the following:
  • Do not operate the crown 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.

NOTE:
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.

TEMPERATURES
[for analogue quartz watch only]
Your watch works with stable accuracy within a temperature range of 5°C and 35°C (41°F and 95°F). Temperatures over 60°C or 140°F (50°C or 122°F for some calibres) may cause battery leakage or shorten the battery life. Do not leave your watch in very low temperatures below −10°C or +14°F (−5°C or +23°F for some calibres) 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.
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.

MAGNETISM
The watch will be adversely affected by strong magnetism. Keep it away from close contact with magnetic objects. (In the case of a quartz watch, normal accuracy will return if the watch is moved away from the magnetic field)

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, 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.