

***TECHNICAL
INFORMATION***

CITIZEN QUARTZ

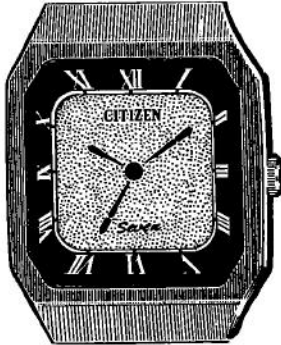
Cal. No. 960✧

 **CITIZEN**

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■1. OUTLINE



This is a digital quartz watch for ladies, featuring an analog display with three hands. It incorporates the alarm and chime functions in addition to the LCD (liquid crystal display) function of time. The handling is easy and simple just through the operation of a crown. A beautiful design of this watch will fully meet the contemporary needs of ladies' fashion.

■2. FEATURES

- 1) Analog LCD
The analog LCD method with three hands enhances the fashion quality of this watch regardless of its multi-function system.
 - 2) Simple operation by crown
Just a single crown can perform all operations of this watch. This enhances not only the operability but the fashion quality of the watch appearance.
 - 3) Melody alarm
The alarm gives a melody with soft tone owing to the adaption of an envelope circuit.*
 - 4) Lifetime of about 2 years for power cell
A long lifetime of about 2 years is attained for the power cell in spite of a small-size module.
- * Envelope circuit
This circuit functions to gradually attenuate the output sound of alarm. The envelope circuit of this caliber is different from that of Cal. No. 24-series in terms of the system. The alarm tone of this caliber is attenuated in 7 steps.

■3. SPECIFICATIONS

| | | |
|------------------------------|---|--|
| Caliber No. | 9600-00 | |
| Type | Digital quartz watch with 3 hands (LCD) | |
| Size of module (mm) | 17.0 (3-9h) x 18.0 (12-6h) x 21.0 ϕ Thickness: 3.65 [†] (Power cell part 3.90 [†]) | |
| Accuracy | ± 20 sec./month at normal temperature | |
| Oscillation | 32,768Hz | |
| Method of display | FE-type nematic LC (liquid crystal) 3-split multiplex driving (Analog display of LC) | |
| Integrated circuit | C/MOS-LSI (1 unit) | |
| Effective temperature range | $\pm 0^{\circ}\text{C} \sim +55^{\circ}\text{C}$ ($32^{\circ}\text{F} \sim 131^{\circ}\text{F}$) | |
| Adjustment of time rate | By trimmer condenser | |
| Display functions | Time | Hour, minute and second* ¹⁾ |
| | Alarm | ON : Set time shown in hour and minute* ²⁾ OFF : Display of "OFF" mark |
| | Chime | ON : Display of pattern OFF : Display of "OFF" mark |
| Additional functions | Alarm monitor* ³⁾ Auto-return system | |
| Power cell (Silver oxide) | Parts No. : 280-53 (1 unit) Maker code : SR721W, Ag ₂ O/KOH, maxell) Size (mm) : 7.8 ϕ x 2.15 [†] Nominal voltage : 1.55V Nominal capacity : 25mAH Lifetime : About 2 years (20 sec. alarm and 12 hourly chimes per day) | |
| Remarks | ● Only the control codes are shown for the difference of colors (silver and gold) of the unfigured reflecting plates. | |

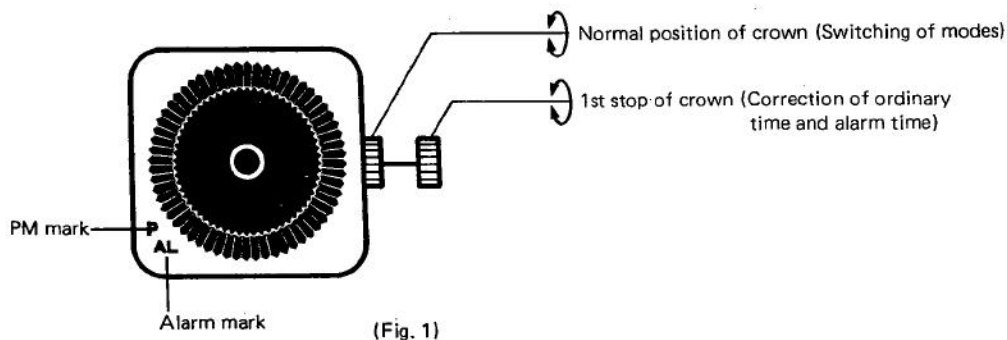
*1) The "P" mark is shown to indicate PM during a correction of time.

*2) The "P" mark is shown to indicate PM.

*3) A pattern is shown during the alarm monitor.

■4. HANDLING INSTRUCTIONS (The mark ○ shows flashing.)

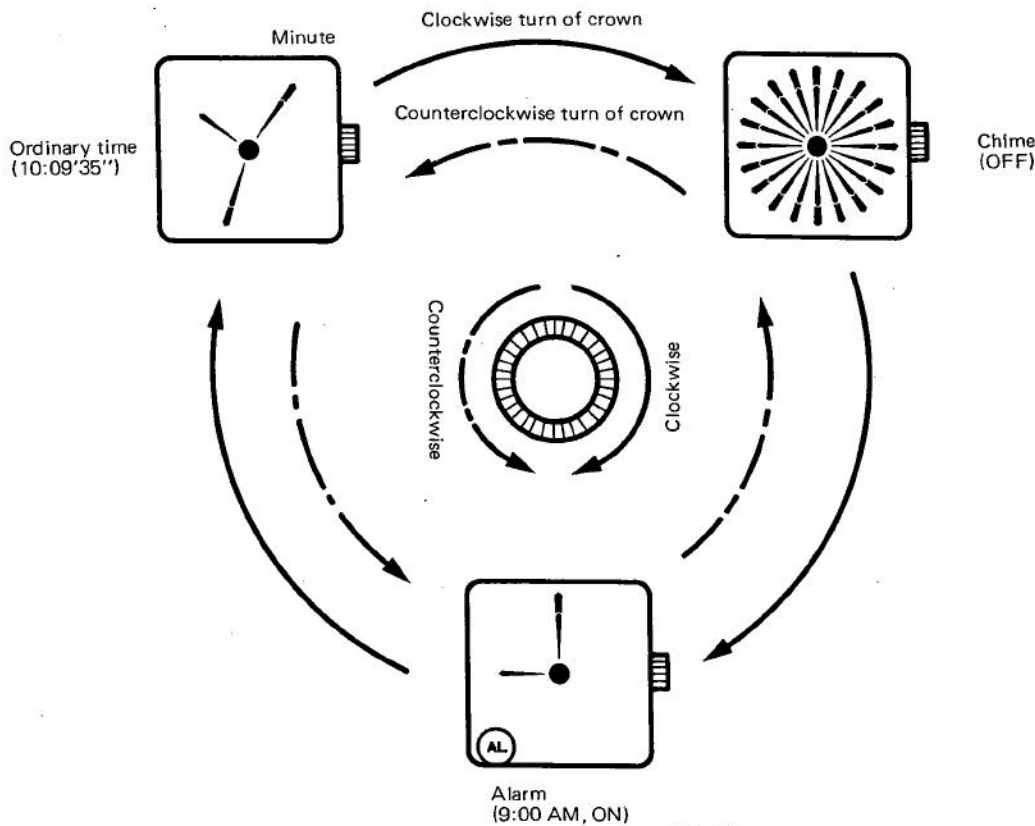
4-1. Appearance and nomenclature



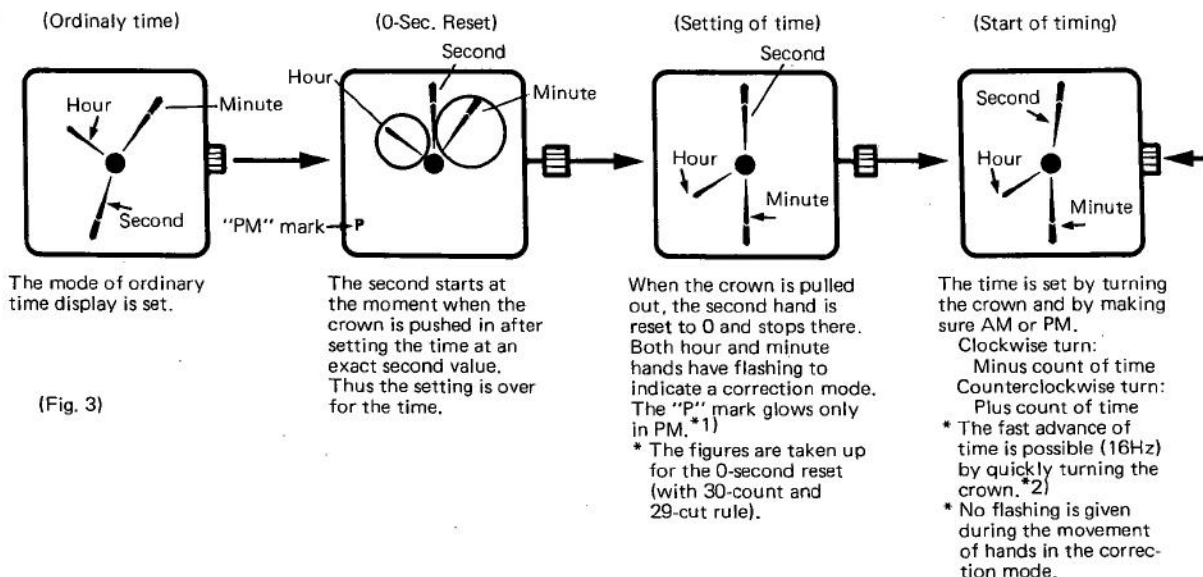
4-2. Switching of modes

As shown in Fig. 2, the modes of display are switched by turning the crown at its normal position.

- No operation is given at the first turning click of the crown for the purpose of preventing the malfunctioning. The switching of modes is possible at and after the second click.
- The display of ordinary time is automatically reset in 2 ~ 3 minutes under the alarm or chime mode. (Auto-return system)



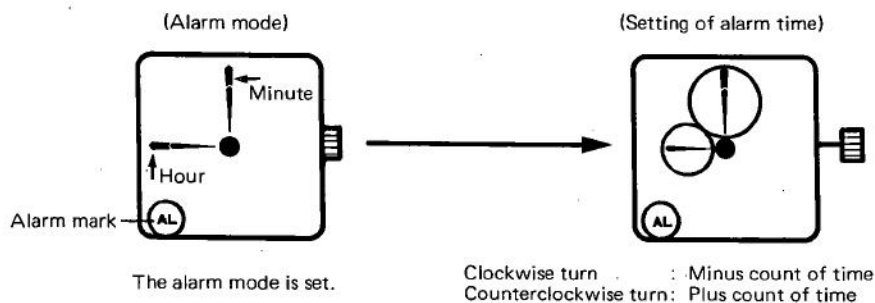
4-3. Correction of time



(Fig. 3)

- *1) No mark is provided to indicate AM, i.e., the glowing of "P" mark indicates PM and no glowing of "P" mark indicates AM respectively.
- *2) The fast advance of time discontinues once when the time equivalent to an hour is advanced. If you want to stop the fast advance of time midway, turn the crown counterclockwise by one click.

4-4. Correction of alarm time



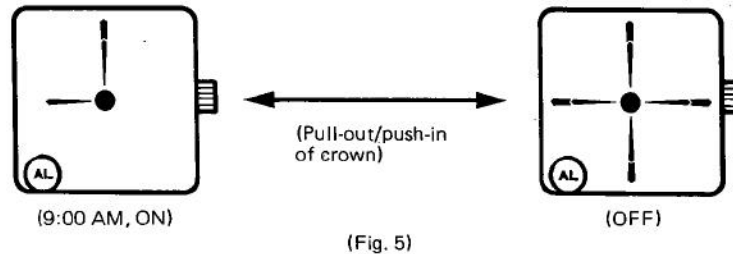
(Fig. 4)

Then the crown is pulled out, both hour and minute hands have flashing. An alarm time is set by turning the crown in the same way as that for the correction of ordinary time and by making sure AM or PM. The crown is pushed into its normal position to complete the setting of alarm time.

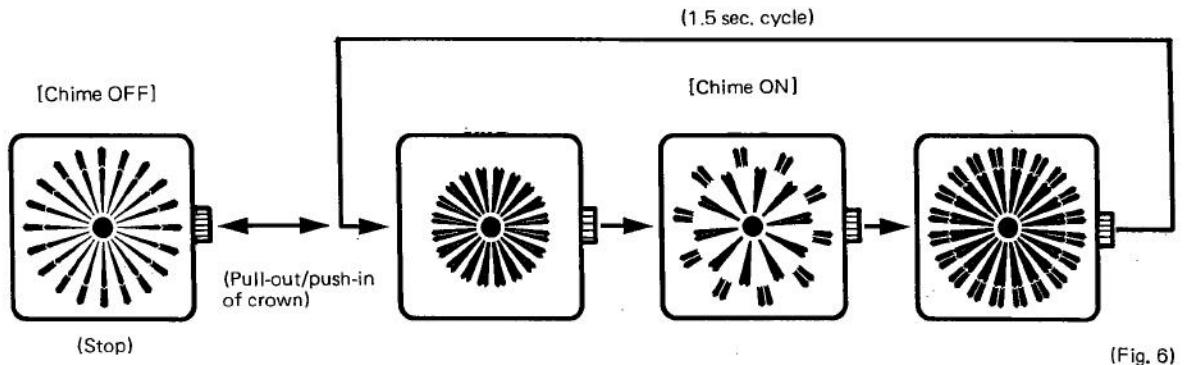
- No time is displayed at first in the alarm OFF mode, and the time previously set is shown when the crown is pulled out.
- The fast advance of time (16Hz) is possible by quickly turning the crown.
- No flashing is given during the movement of hands in the correction mode.

4-5. Alarm ON/OFF

As shown in the diagrams below, the alarm function is switched on and off by pulling out and pushing in the crown with no turning.



4-6. Chime ON/OFF



The chime mode is turned on and off by pulling out and pushing in the crown respectively.

The display stands still in the OFF mode, and three different patterns are displayed in the ON mode in a cycle of 1.5 seconds (0.5 sec. each).

- When the crown is pulled out, the alarm monitor mode is set to display patterns regardless of ON or OFF of the chime mode.

4-7. Alarm monitor

The monitor is possible for the chime tone when the crown is pulled out in the chime mode. In this case, the patterns are displayed as shown in Fig. 6.

4-8. Stopping alarm ringing

The alarm ringing is stopped by turning the crown. (The alarm rings 20 seconds.)