Watch Movement Specification and Drawing

## MULTI - FUNCTION

# Cal. VX3NE

**Movement Size**

## 10 1/2'''
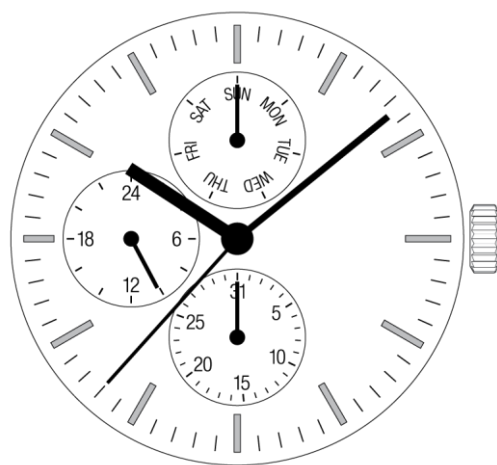
**Casing Diameter**

## Ø 23.3mm

**Height**

## 3.05mm

**Battery Life**

## 3 years

# Cal. VX3NE

## Analog Quartz 10 1/2''' Slim Movement / 3 hands (H/M/S) and 3 eyes with Day / Date / 24 Hour indicators

### 1. MOVEMENT DIMENSIONS

| | |
|---|---|
| Outside diameter | $\phi$24.00mm × 21.50mm(3-9H) × 21.65mm(12-6H) |
| Casing diameter | $\phi$23.30mm × 21.30mm(3-9H) × 21.50mm(12-6H) |
| Total height | 3.05mm (including battery) |

### 2. TIME STANDARD

| | |
|---|---|
| Type of quartz oscillator | Tuning fork |
| Frequency of quartz oscillator | 32,768 Hz |
| Accuracy | ±20 seconds per month (on wrist) |
| Operating temperature range | −5℃ to ＋50℃ |
| Regulation device | Nil (Pre-adjusted) |

### 3. INDICATOR / FUNCTIONS

| | | |
|---|---|---|
| 3 Hands | Hour / Minute / Second | |
| 3 Small hands | Day (12H) / Date (6H) / 24 Hour (9H) | |
| Reset switch | | |
| Setting mechanism | Crown at normal position | : Free |
| | Crown pulled out 1st click | : Instant date change |
| | Crown pulled out 2nd click | : Time setting (Day change) / Reset |

### 4. FEATURES

| | | |
|---|---|---|
| Jewels | 0 Jewels | |
| Anti-magnetism | Over 1600A/m (Direct current magnetic field) | |
| Maximum unbalance of hands | Second hand | : 0.07 $\mu$N・m |
| | Minute hand | : 0.6 $\mu$N・m |
| | Hour hand | : 0.5 $\mu$N・m |

### 5. BATTERY

| | |
|---|---|
| Type / Size | Silver oxide battery / $\phi$9.5mm × t 2.0mm |
| Recommended battery | SR920SW (Maxell, Murata, Seizaiken) |
| Nominal voltage | 1.55 V |
| Battery life | Approx. 3 years |
| Driving current consumption | Approx. 1.6 $\mu$A |
| Operation stopping voltage | 1.1 V |

### 6. SEPARATED PARTS (Parts code)

| | |
|---|---|
| Hand setting stem | 0351177 or 0351578 |
| Battery | SR920SW |

### 7. TEST OF ACCURACY

| | |
|---|---|
| Equipment to be used | SEIKO quartz tester QT-99, Greiner quartz timer-C , Witschi Q-tester 4000 |
| Duration of measurement | 10 seconds |
| Microphone to be used | Electromagnetic detection type |

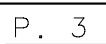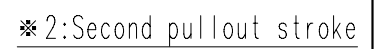All specifications are subject to change without notice.

Hands type

| | | Mark |
|---|---|---|
| Type S (1) | | 1 |

NO JEWELS
S.EPSON CORP.
VX3NE
JAPAN
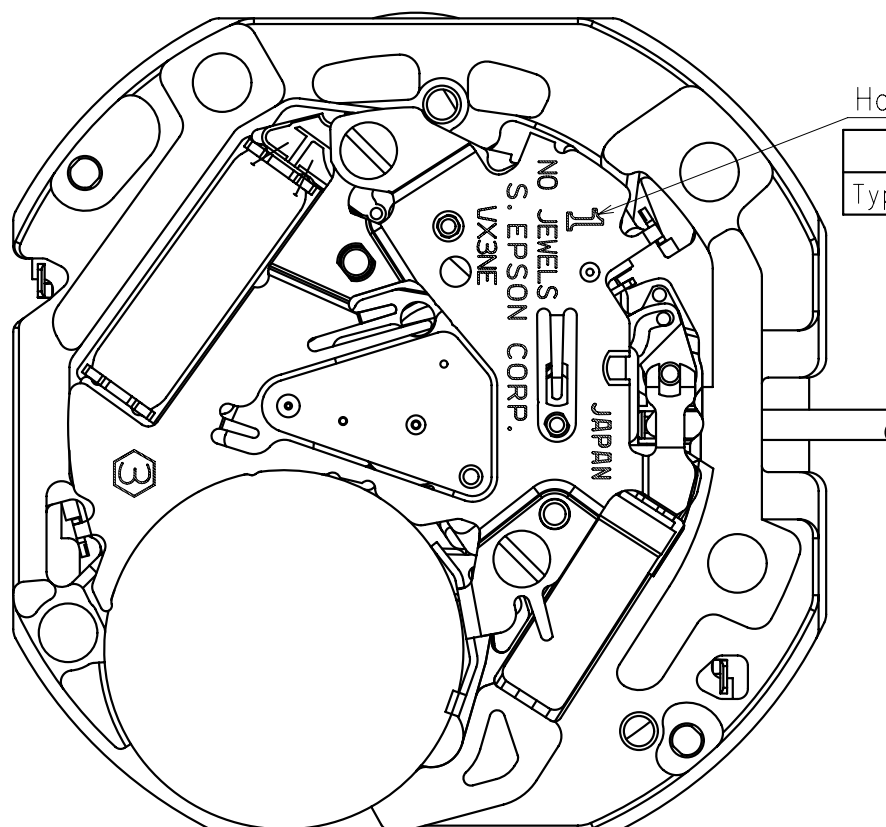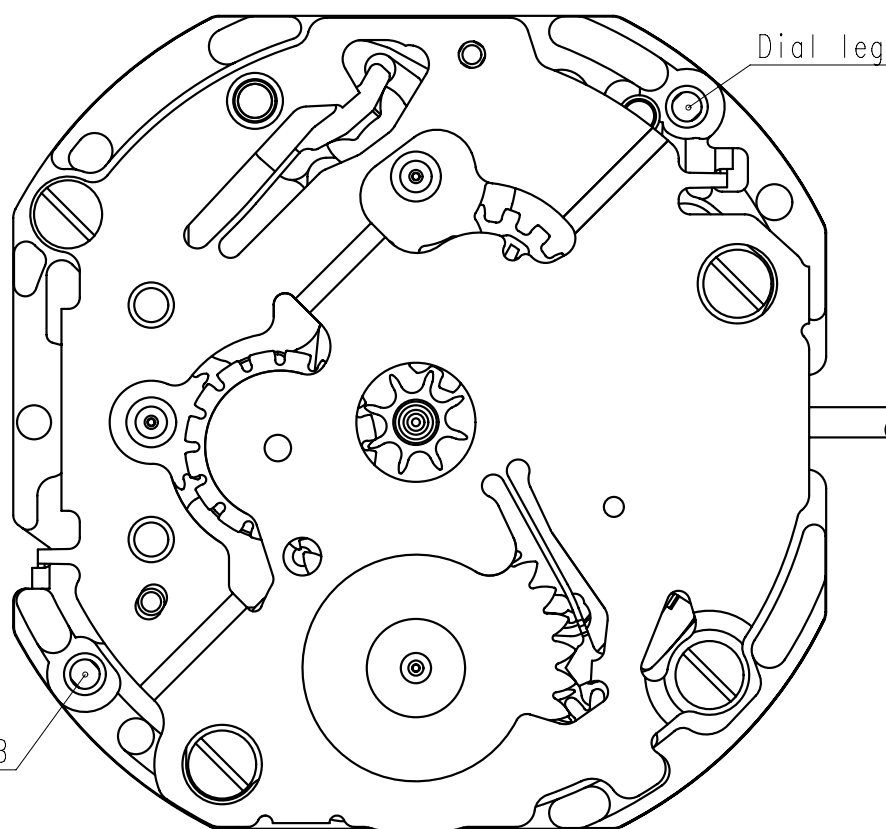
Dial leg hole A

Dial leg hole B

| Center post | | Type S (1) VX3NE1 |
|---|---|---|
| Maximum height from dial support | H1 | 180 |
| Total height including movement | H2 | 485 |
| Maximum height from dial support | H3 | 63 |

※1:First pullout stroke

※2:Second pullout stroke

※ Hour hand unbalance ≦ 0.5μ N·m (50μ g·m)
※ Minute hand unbalance ≦ 0.6μ N·m (60μ g·m)
※ Second hand unbalance ≦ 0.07μ N·m (7μ g·m)

$\phi110^{+1}_{0}$

66

Hour wheel

$\phi65.6\pm0.6$

35

Center wheel

$\phi20.05$   Taper3/100

45

25

$\phi20.8\pm0.65$

$\phi21.4^{+0.6}_{-0.5}$

Fourth wheel

3°

25 25

$\phi21\pm0.6$

Date wheel
Day wheel
24 Hour wheel
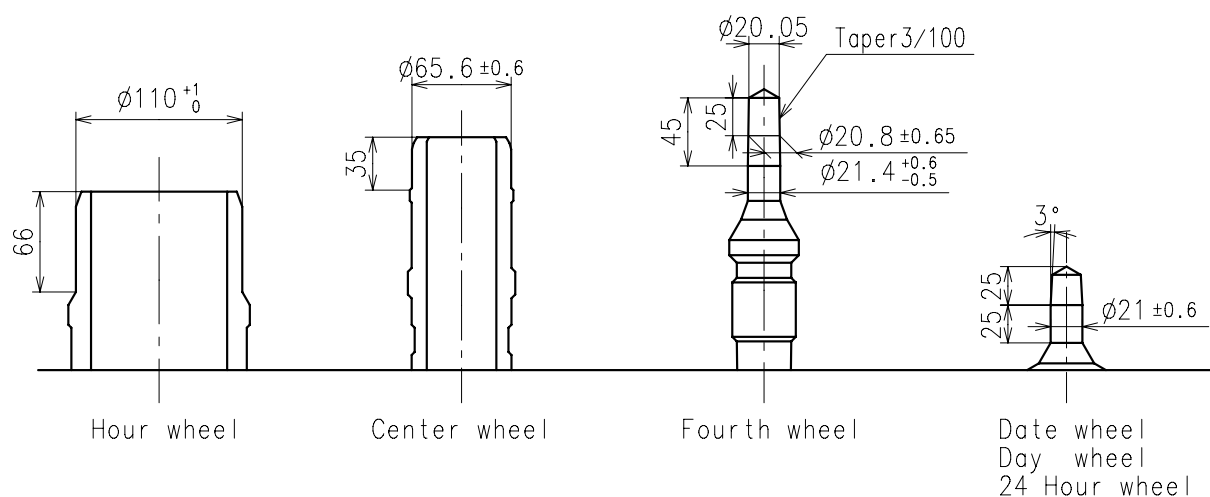
| | Parts No. | | | | | |
|---|---|---|---|---|---|---|
| | Hour wheel | Center wheel | Fourth wheel | Date wheel | Day wheel | 24 Hour wheel |
| Type S (1) VX3NE1 | 0271563 | 0221575 | 0241528 | 0970538 | 1002546 | 1002503 |

(Glass)

※1 R

L6

T

T

T

L1

L2

L3

(Index)

L7

(Dial)

L4

L5
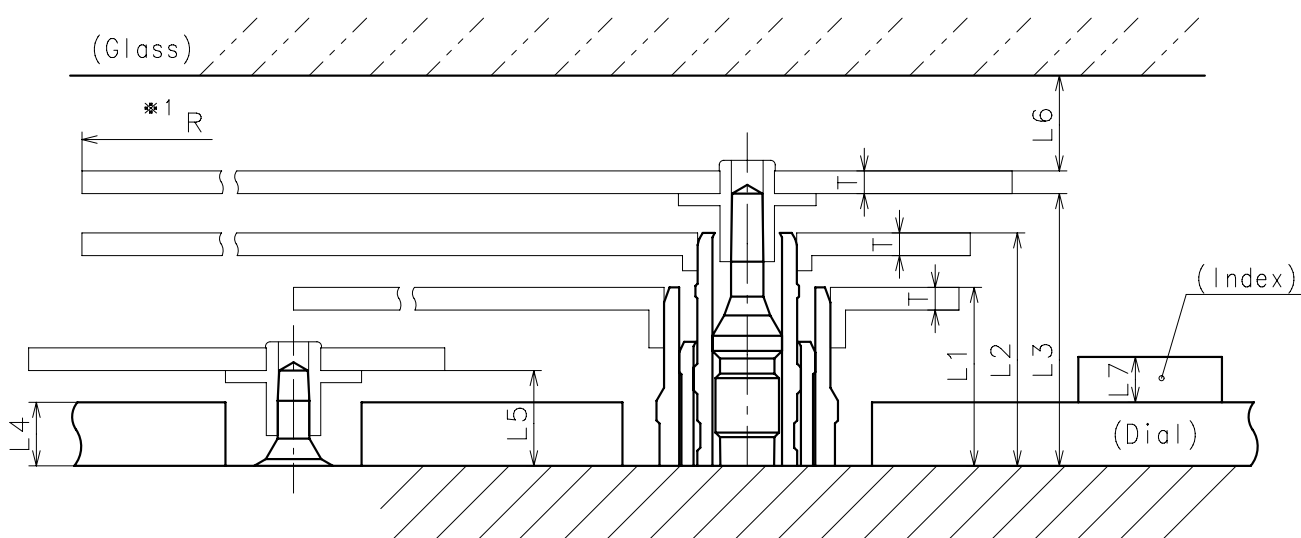
| | L1 | L2 | L3 | L4 | L5 | L6 | L7 | T | ※1 R |
|---|---|---|---|---|---|---|---|---|---|
| Type S (1) VX3NE1 | 118 | 154 | 180 | 40 | 63 | MIN: 50 | MAX: 30 | 15 | MAX: 1250 |

※1:It is the size taken into consideration for hands attachment.
Please observe some standard value specified in unbalance when using long hands.
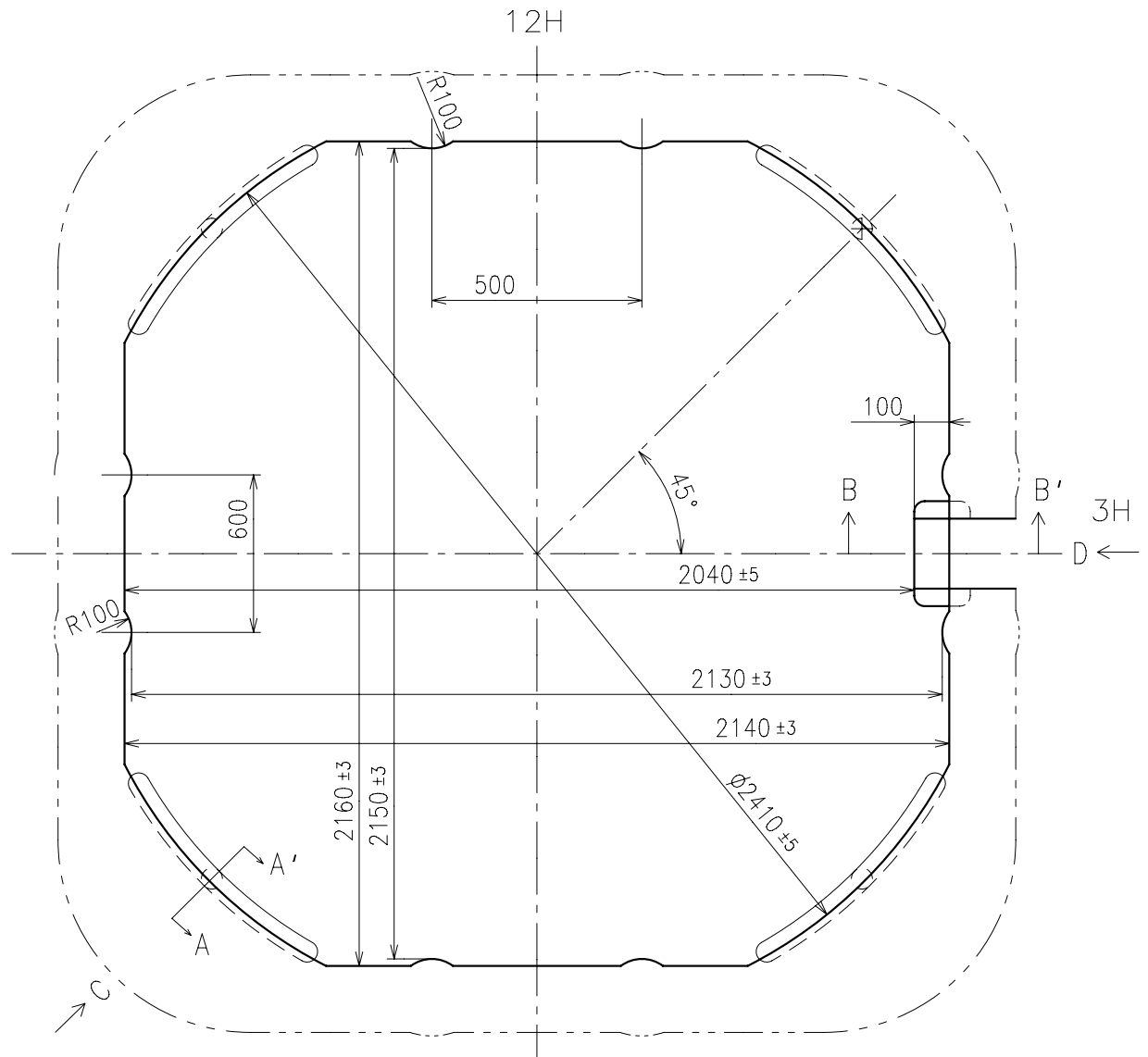
| Cal.<br>VX3NE | Hand setting stem | Date:27/Aug./'14 |
| | | Rev.:03 |



∅90 P22.5

∅82 +0.6 -0.8

∅110 0 -1.5

※ S3

S1

S2
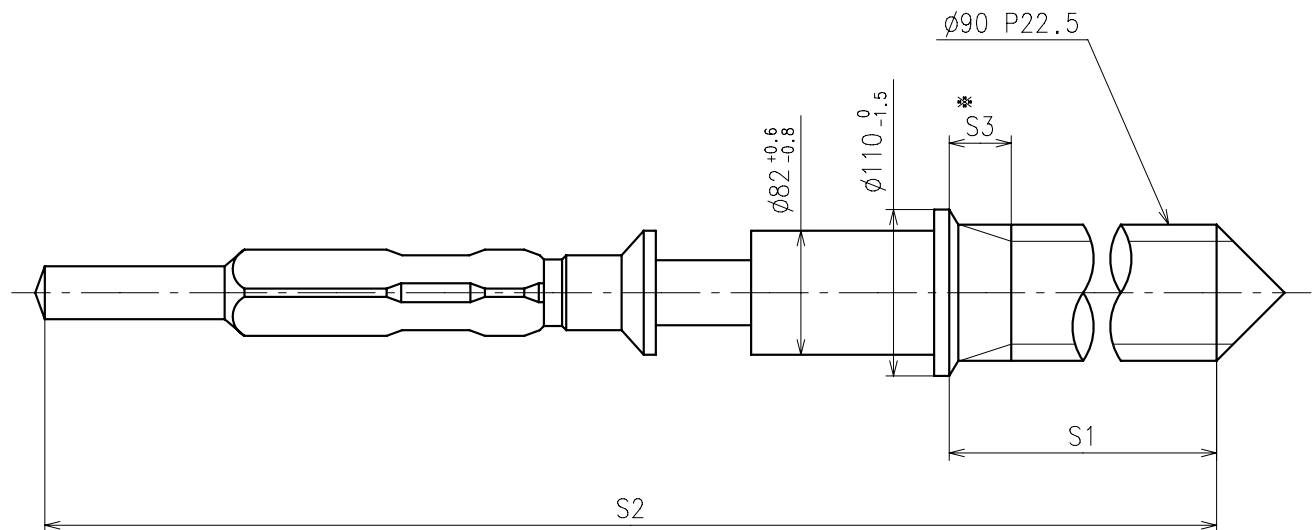
※ Not threaded

| | Part No. | S1 | S2 | ※ S3 |
|---|---|---|---|---|
| Type-1<br>(Standard) | 0351177 | 1366 | 1964 | 60 |
| Type-2 | 0351578 | 2507 | 3105 | 650 |

Material : Steel

Hardness : Vickers 600±50

12H

716.59

A

Day

700

650

834.56

3H

24 Hour

650

666.05

B

Date

875.43

24 Hour
Day
Date

A,B

(40)

R10

$180^{+100}_{-45}$

$\phi75 \pm 2$

$\phi165^{+5}_{-10}$

$\phi90 \pm 5$

12H

R100

500

100

B  B'  3H

45°

600  2040 ±5  D

R100

2130 ±3

2140 ±3

ø2410 ±5

2160 ±3
2150 ±3

A'

A

C

C view    A-A' section    B-B' section    D view

ø2410 ±5
ø2336 ±3

60 ±5

70 ±3    70 ±3    60 ±5    200 ±5

200    155 ±3    55 ±5    85 ±5
140 ±5

50 ±3

500 ±5    60 ±3    400 ±5

600    ø2456 ±10

Day hand

Hour hand

Minute hand

24 Hour hand

Second hand

Date hand

0 → 1 → 2
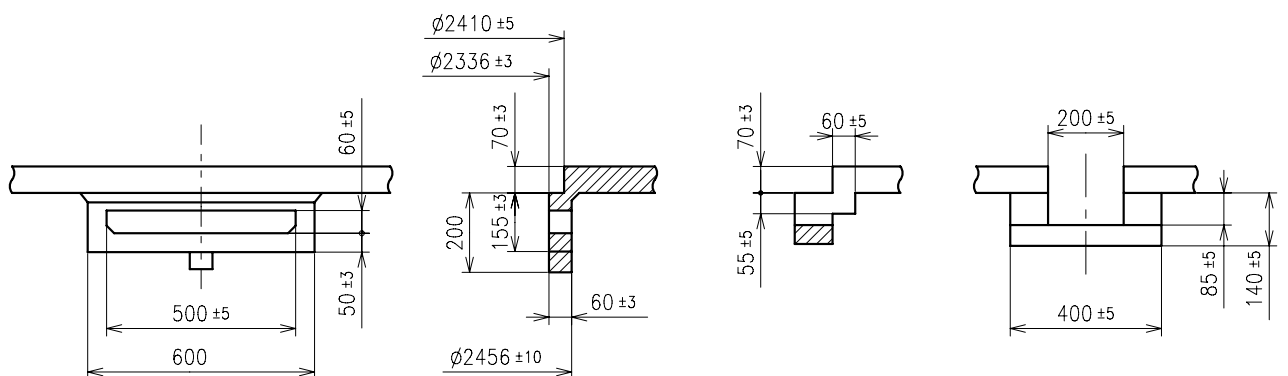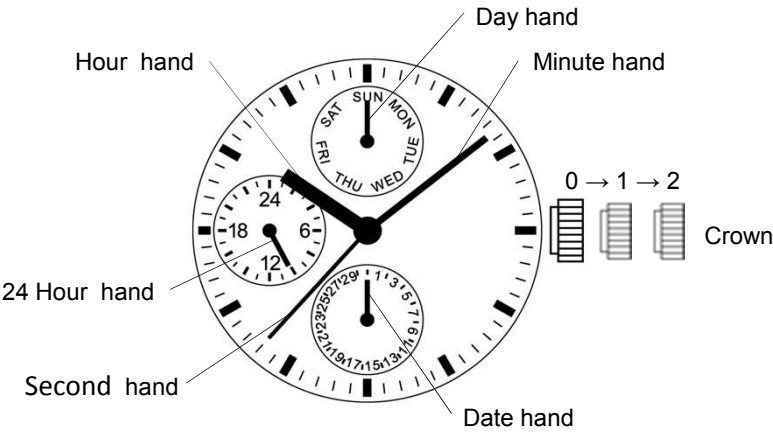
Crown

| Crown position | | |
|---|---|---|
| 0 click | 1st click | 2nd click |
| Crown | Free | Turn counterclockwise for date change | Time setting (Day change) |