

SET /LIGHT (Button A) ———



———— (Button E) UP

———— (Button D) COMP

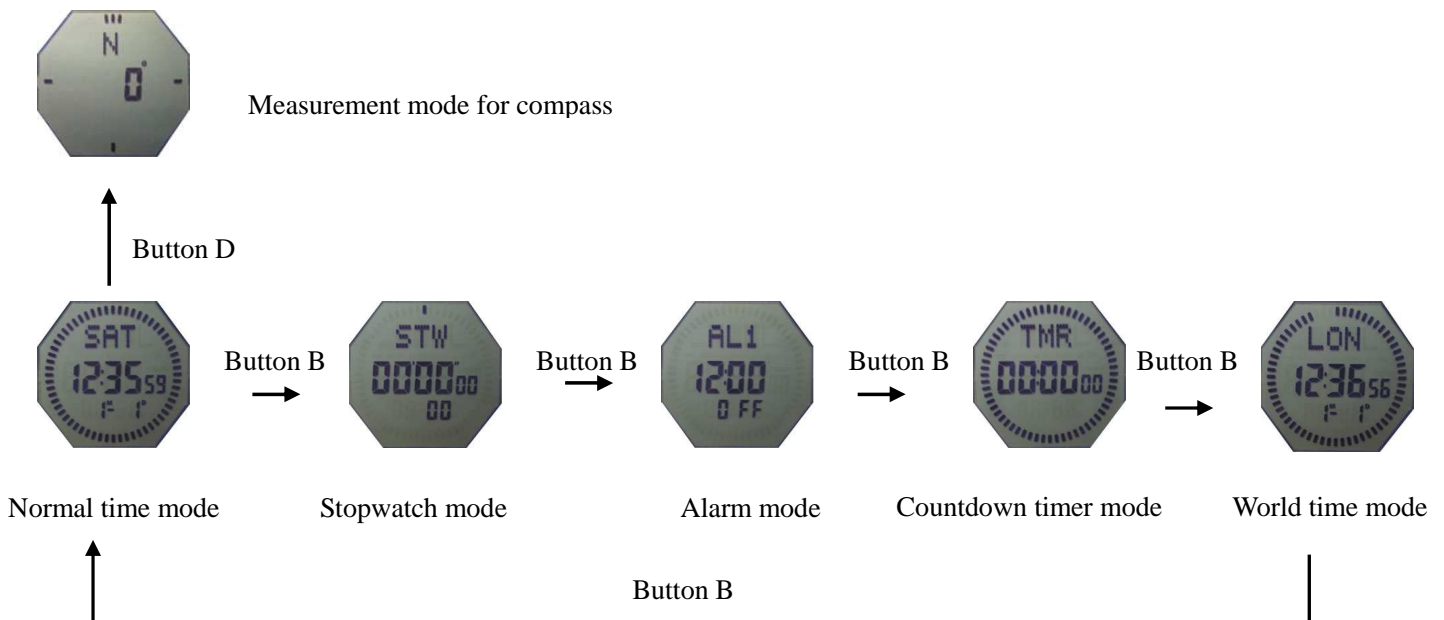
MODE (Button B) ———

———— (Button C) DOWN

A . Features

- LCD screen displays hour, minute, second, year, month, date and week.
- Auto calendar: from year 2000 to year 2099.
- 3 daily alarms.
- Hourly time signal.
- Stopwatch: the maximum display range of stopwatch is 99 hours, 59 minutes, 59 seconds.
- Countdown timer: the maximum display range of countdown timer is 99:59:59.
- Electronic compass.
- 12-hour/24-hour format.
- World time, time for 48 cities.
- Daylight saving time.
- Button tone.
- EL backlight for 3 seconds.

B . Product Functional Mode



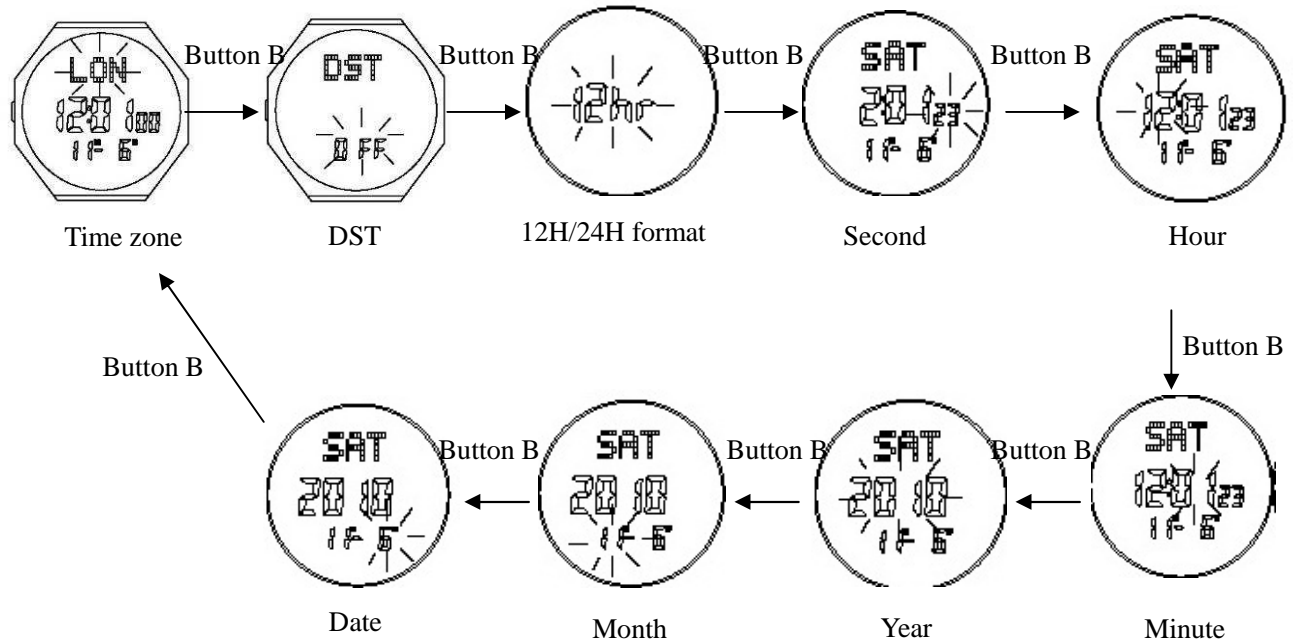
1. In any mode, EL illuminates for 3 seconds by pressing (Button) A once.

2. Normal time mode

- Press A once, EL illuminates for 3 seconds. Hold down A for 2 seconds to enter setting mode.
- Press B to select operating mode.
- Press C to switch the format between “date---month” and “month---date”.
- Press D to enter compass measurement mode.
- Press E to switch the mode between “world time” and “normal time”.

3. To set time and date

- In normal time mode, hold down A for 2 seconds, “Time zone” starts to flash, which indicates setting mode, then press B to select other setting items(flash) in sequence as below:



- Press E to increase time zone, hold down E to increase time zone quickly.
- Press C to decrease time zone, hold down C to decrease time zone quickly.
- Press E or C to turn on / off daylight saving time. Indicator of “DST” will appear on the screen when daylight saving time is turned on.
- Press E or C to switch 12-hour / 24-hour format.
- Press E to increase the values, hold down E to increase the values quickly.
- Press C to decrease the values, hold down C to decrease the values quickly.
- Press E or C to clear “seconds” to zero.
- Press A to confirm and exit from setting, then return to normal time mode.
- In setting mode, if you do not perform any button within one minute, the watch will automatically exit from setting, and then return to normal time mode.

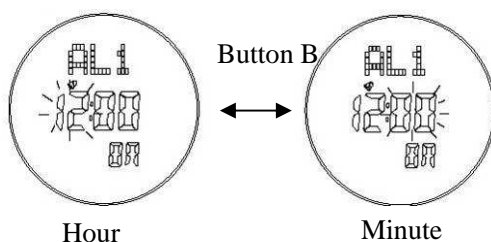
4. Alarm mode

a) Turn on / off alarm

- In alarm mode, press C to toggle 3 daily alarms in sequence: AL1→AL2→L→SIG .
- Press D to turn on / off alarm “ ♥ ” . Press D to turn on / off hourly time signal (CHI).

b) To set alarm

- In the first alarm (AL1) mode, hold down A for 2 seconds, “Hour” starts to flash, “minute” flashes by pressing B, please as following:



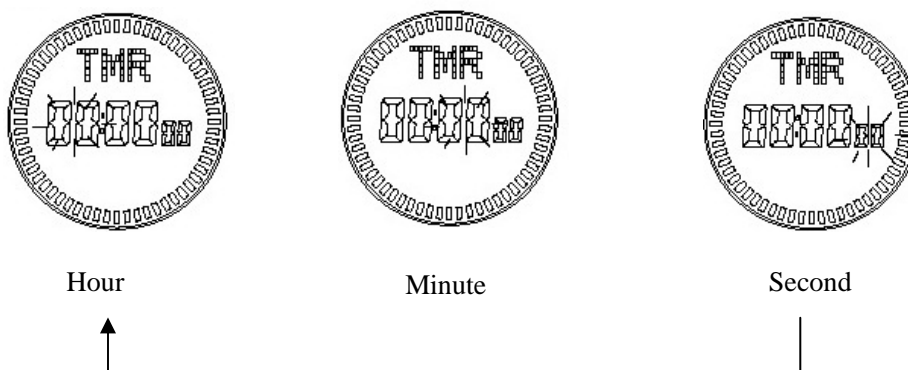
- Press E to increase the values, hold down E to increase the values quickly.
- Press C to decrease the values, hold down C to decrease the values quickly.
- Press A to confirm and exit from setting, then return to normal time mode.
- In setting mode, if you do not perform any button within one minute, the watch will automatically exit from setting, and then return to normal time mode.
- When alarm time is reached, alarm tone will sounds for 60 seconds, and alarm indicator “ ♥ ” will flash.
- To stop the alarm tone after it starts to sound, press any button.
- Note: The setting method of “AL2 and AL3” is same as AL1’s.

5. Stopwatch mode

- The maximum display range of stopwatch is: 99 hours, 59 minutes and 59 seconds.
- In stopwatch mode, press E to start / stop counting. Press C to reset to zero when stopwatch stopped.
- When stopwatch is counting, press C to enter SPL time(split time), indicator of “SPL” will display on the screen.
- Press C to exit from SPL(split time), stopwatch continue to run.
- The stopwatch will restart to count from 00 when reach its maximum limit.
- If you don’t stop the stopwatch, the stopwatch will continue to run at the background after pressing B to exit from stopwatch mode.

6. Countdown timer mode

- The maximum display range of countdown timer is: 99 hours, 59 minutes and 59 seconds.
- a) **To set countdown time**
 - In countdown time mode, hold down A for 2 seconds, “Hour” starts to flash, which indicates countdown time setting, then press B to select other setting items(flash) in sequence as below:



- Press E to increase the values, hold down E to increase the values quickly.
- Press C to decrease the values, hold down C to decrease the values quickly.
- Press A to confirm and exit from setting, then return to normal time mode.
- In setting mode, if you do not perform any button within one minute, the watch will automatically exit from setting, and then return to normal time mode.

b) To use countdown timer

- Press E to start counting down.
- When countdown timer is running, press E to pause, then press E once more to go on running.
- If you want to cancel countdown time, after pressing E to pause, then countdown time will return to the original value by pressing C.
- When countdown time is reached to 00:00:00, the watch will sound for one minute. Press any button to stop it.
- If you don't stop countdown timer, the countdown timer will continue to run at the background after pressing B to exit from countdown timer mode.

7. World time

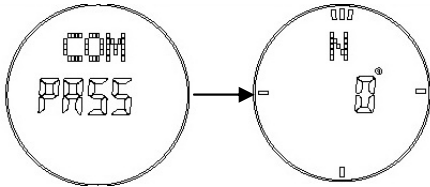
- In world time mode, press A to turn on / off daylight saving time. When “DST” is displayed, it indicates that the DST function is turned on. If no “DST” displayed, it indicates that the DST function is turned off.
- Press E to view the time zone & time upward, hold down E to fast view the time zone & time upward.
- Press C to view the time zone & time downward, hold down C to fast view the time zone & time downward.

World time table:

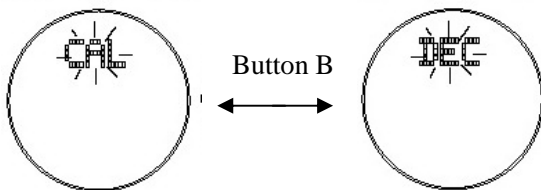
City Code	City	GMT Differential	Other major cities in same time zone
UCT	Gatwick	00.0	
LIS	Lisbon		
LON	London	00.0	Dublin,Lisbon Casablanca,Dakar,Abidjan
MAD	Madrid	+01.0	, Milan Rome,Madrid,Amsterdam,Algiers.Hamburg, Frankfurt,Vienna,Stockholm,Berlin.
PAR	Paris		
ROM	Roma		Roma
BER	Berlin	+01.0	
SOT	Stockholm		
ATH	Athens	+02.0	Helsinki,Istanbul,Beirut Damascus Cape town, Frankfurt, Vienna, Madrid, Stockholm
CAI	Cairo	+02.0	Athens Helsinki,Istanbul,Beirut Damascus Cape town
JRS	Jerusalem	+02.0	
MOW	Moscow		
JED	Jeddah	+03.0	Kuwait Riyadh,Aden Addis Ababa Nairobi Moscow Shiraz
THR	Teheran	+03.5	Teheran
DXB	Dubai	+04.0	Abu Dhabi Muscat
KBL	Kabul	+04.5	
KHI	Karachi	+05.0	MV Maldives
DEL	Delhi	+05.5	Mumbai Kolkata, New Delhi
KMT	Cambodia		
DAC	Dacca	+06.0	Colombo
RGN	Rangoon	+06.5	Rangoon
BKK	Bangkok	+07.0	Jakarta,Phnom Penh,Hanoi Vientiane
SIN	Singapore		
HKG	Hongkong	+08.0	Singapore Kuala Lumpur Beijing Taipei Manilla Perth Ulaanbaatar
BJS	Beijing		
TEP	Papua New Guinea		
SEL	Seoul	+09.0	Seoul Pyongyang (SEL)
TYO	Tokyo	+09.0	
ADL	Adelaide	+09.5	Darwin
GUM	GU Guam		
SYD	Sydney	+10.0	Melbourne Guam Rabaul
NOU	Noumea	+11.0	Port Vila
WLG*	Wellington	+12.0	
PPG	Pago Pago	-11.0	
HNL	Honolulu	-10.0	Papeete
ANC	Anchorage	-9.0	Nome
YVR	Vancouver		
LAX	Los Angeles	-8.0	San Francisco,Las Vegas,Vancouver,Seattle/Tacoma,Dawson City
YEA	Edmonton		
DEN	Denver	-7.0	Edmonton
MEX	Mexico		
CHI	Chicago	-6.0	Houston,Dallas/Ft,worth,New Orleans,Mexico City,Winnipeg
NYC	New York	-5.0	Montreal,Detroit,Miami,Boston,Panam a City,Havana,Lima,Bogota
SCL	San Diego		
YHZ	Halifax		
YYT	Caracas	-4.0	Lapaz, Santiago, Port of Spain
RIO	Rio de Janeiro	-3.0	Sao Paulo, Buenos Aires,Brasilia,Montevideo
FEN	Brazil	-2.0	
RAI	PRAIA	-1.0	

8. Compass measurement mode

- In normal time or measurement mode, press D key to enter compass measurement mode. With COMPASS displayed, electronic needle will sweep a circle clockwise and then enter the compass measurement mode. It will return to clock mode automatically if you do not perform any button within 60 seconds.



- In compass mode, hold down A for 2 seconds to enter correction mode, press B to select Manual Correction or Digital Correction. As following:

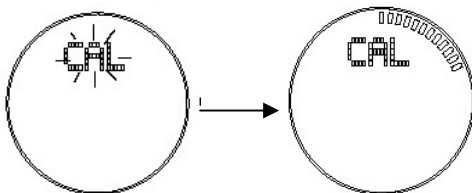


Manual Correction Mode

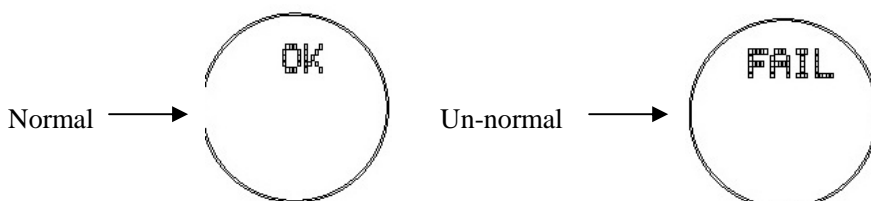
Digital Correction Mode

a) Manual correction mode

- In manual correction mode, press E or C button, then turn the watch slowly, both clockwise direction and anti-clockwise direction are ok. The watch will automatically confirm correction and return to compass measurement mode as long as turning two circles in the same direction. Note: (After replacing the battery, this watch will enter auto correction mode firstly by using the compass first time. In order to correct the compass conveniently, please turning two circles according to the above method.)

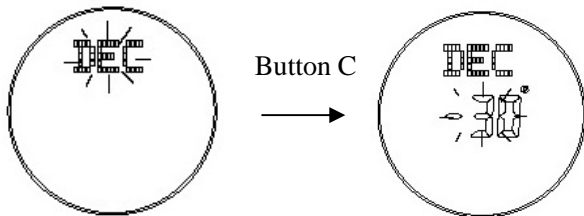


- After turning two circles, the result of auto correction is as below:



b) Digital correction mode

- In digital correction mode, it is northern direction correction 1~ 45° by pressing E, which indicates to increase the correction angle range (the maximum correction angle range is 45°). Press C to decrease the correction angle range (the minimum correction angle range is -45°), please as following figures:



- Press A to confirm the corrected value, and return to normal measurement mode.
For example: If you find the direction which is measured by the watch is not correct, please use other compass to measure out the northern direction first, then use “12 hour” of the watch to align the northern direction, press D key to measure compass, if the arrow point direction is 30° of west , you should input -30° according to above operation method, to measure compass after press A key to confirm, in the meanwhile, the arrow will point at northern direction, which means correction is complete. If you do not find any other compass to measure out northern direction, please use manual correction to measure out northern direction automatically within +/-11°, but please notice that the value must be set as “00” when you select in the “DEC” digital correction mode.
- The following table indicated the meaning of each acronym for each direction.

Direction	Meaning	Direction	Meaning	Direction	Meaning	Direction	Meaning
N	North	NNE	North-north-east	NE	North-east	ENE	East-north-east
E	East	ESE	East-south-east	SE	South-east	SSE	South-south-east
S	South	SSW	South-south-west	SW	South-west	WSW	West-south-west
W	West	WNW	West-north-west	NW	North-west	NNW	North-north-west

➤ **Notice for Digital compass**

This watch has a magnetic direction sensor, which can detect geomagnetism. That means the north indicated by this watch is the magnetic north pole, it is a little different from the real North Pole. The magnetic north pole is located in the north of Canada, and the magnetic South Pole is located in the south of Australia. Please note that, when measure using magnetic compass, the more close to the magnetic pole of the earth, the bigger difference between the magnetic north pole and real North Pole. In addition, some maps marked with real North Pole (not the magnetic north pole). Thus when using that kind of maps with this watch, proper adjustment is needed.

➤ **Location measurement**

When measure direction near a strong magnetic field, a huge error will be created. Thus the following objects shall be avoided when measuring direction: eternal magnet (magnetic necklace), metal block (iron door, metal store ark, etc.), high voltage electrical wire, antenna, home electrical appliance (TV set, personnel computer, washing machine, refrigerator, etc.).

When in the train, ship or plane, etc. the direction can not be measured correctly.

When in doors, especially in a building made up of many metals, the direction can not be measured correctly. This is because the metal structure within the building will absorb the magnetic force from the electrical appliance.

➤ **Preservation**

If this watch is magnetized, the definition of the direction sensor will be reduced. Thus please don't put this watch in a place near a magnet or any object which gives off strong magnetic force. These objects include: eternal magnet (magnetic necklace, etc.) and home electrical appliance (TV set, computer, washing machine, refrigerator, etc.).

If you doubt that your watch may have been magnetized, please conduct digital correction and manual correction in the "Direction sensor correction".

➤ **The reason why the direction measured is incorrect**

If the direction is incorrect, please conduct direction correction. If measure direction near strong magnetic field, such as home electrical appliance, large iron bridge, steel pillar, overhead cable, etc. or measured the direction in a train or ship, it will result in error. Please move away from the large metal object and measure the direction once again. Please note that the digital compass can not be used in train or ship.

➤ **Why different results will be produced when measure direction in a same place?**

The magnetic force from high voltage cable nearby give interference to the geomagnetic detection by this watch. Please move away from high voltage cable and do detection once again.

➤ **Why problem occurs when measure direction indoor?**

TV set, personnel computer, speaker or other objects will interfere in the geomagnetic detection by this watch. Please keep away from interferential objects or do detection outdoor. It will be more difficult when do direction detection within a building made of reinforced concrete. Please note that the direction detection can not be conducted in train or plane.

C. Specifications

- Module dimension : 42mm±0.1
- Module thickness (not including buzzer) : 7.9 mm±0.1
- Working temperature range : -10℃~+60℃
- Working voltage : 3.0V
- Time accuracy : ±60 sec/month (T=25℃)
- Digital compass precision : ±11° (-10℃~40℃)
- Battery type : CR2025 (220mAh)
- Static average driving current : ≤6 u A (Static maximum driving current: 13u A)
- Alarm average current : ≤1.5 m A (Alarm maximum current: 4.5 m A)
- Average current of EL illumination : ≤10 m A (Maximum current of LED illumination: 12m A)
- Average current for digital compass operation : ≤0.3 m A (Maximum current for digital compass operation: 0.8m A)
- Battery life : 12 months (Japan lithium)

According these standards to calculate the battery life: Digital compass operation thrice per day for 30 seconds each time. EL backlight operation 4 times (12 seconds) per day. Alarm tone sounds once (60 seconds) per day.

	Prepared	Checked	Approved
Name	李觉	赵星亮	宋检望
Date	11/09/06	11/09/06	11/09/08