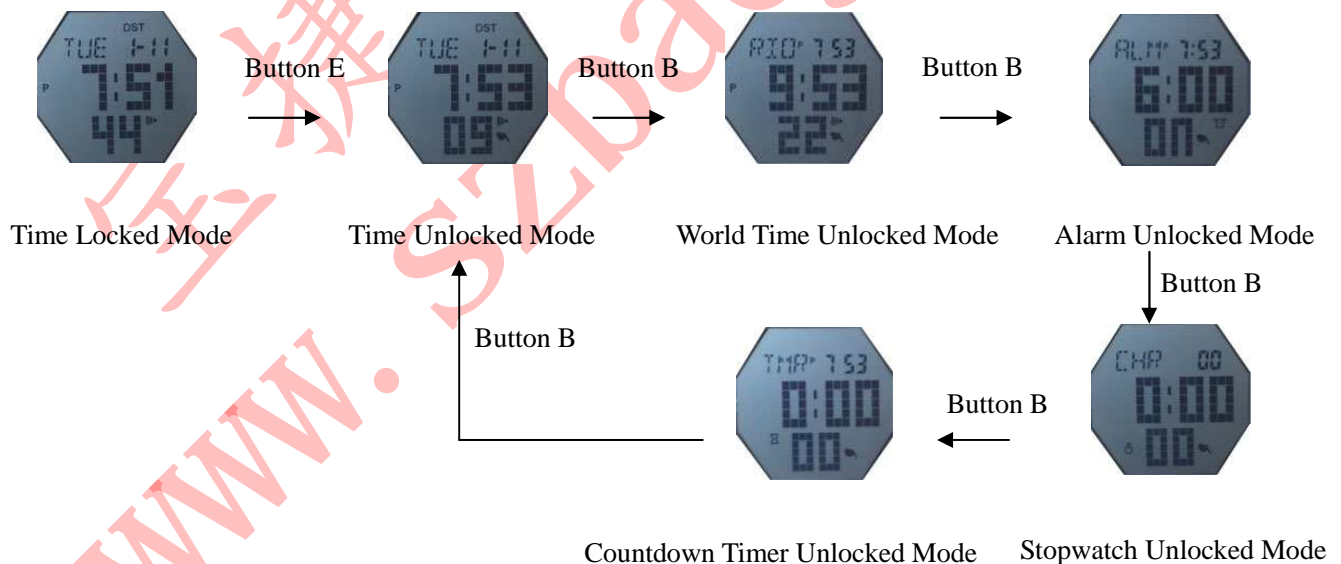




A . Features

- 13 digits LCD screen displays hour, minute, second, (month, date, day of the week)
- 12-hour / 24-hour format. Auto-calendar.
- Alarm.
- Stopwatch (from 1/100 second to 23 hours, 59 minutes, 59.99 seconds).
- Countdown timer.
- World time.
- Touch screen function.
- Button tone can be turned on / off.
- EL backlight.

B . Product Functional Modes

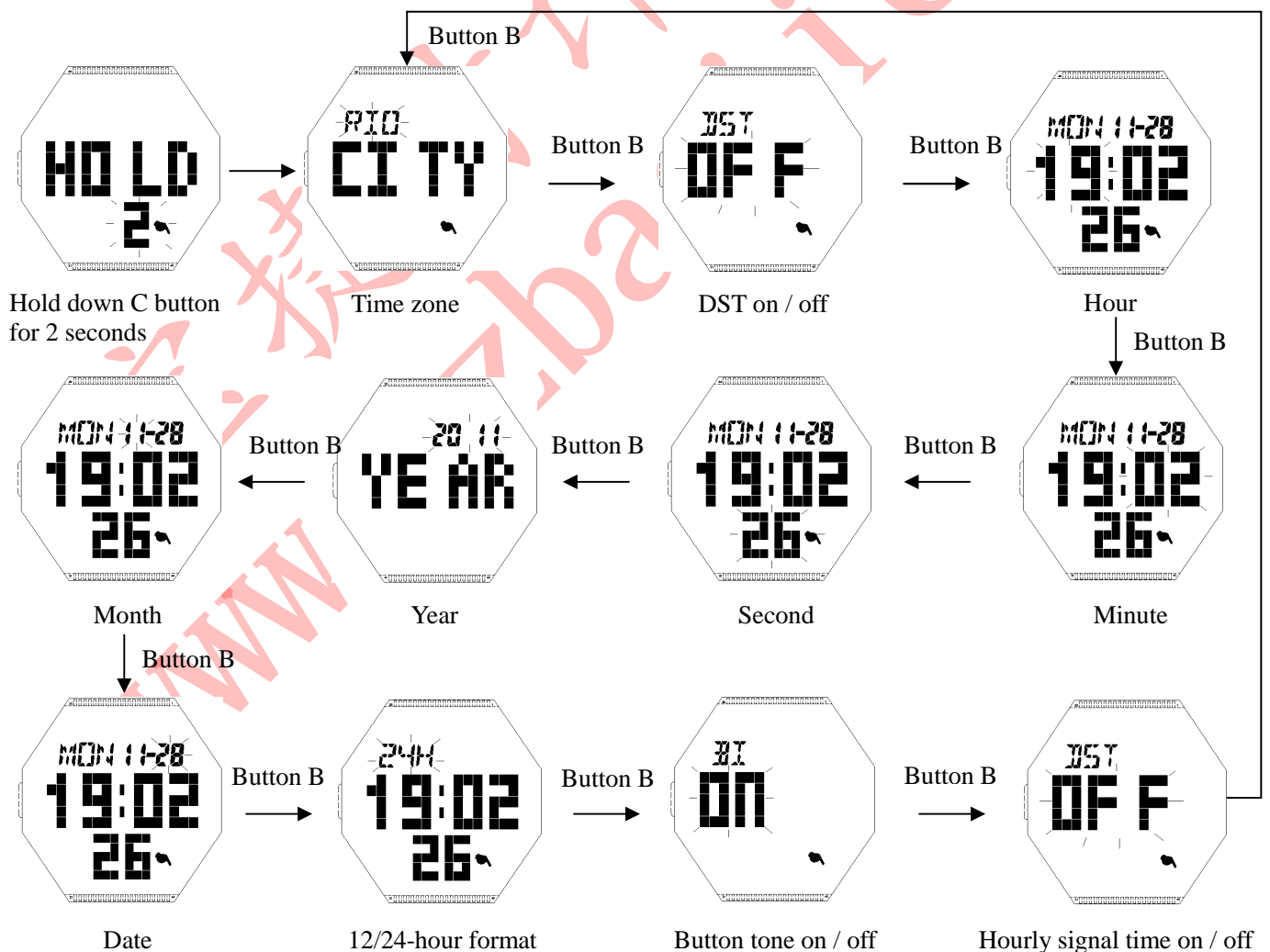


- In screen locked mode, there is no (🌙) indicator appears on the screen. Press E button to release buttons, (🌙) indicator will appear on the screen.
- In normal time mode, the watch will automatically lock the buttons if you do not perform any button within 10 seconds.

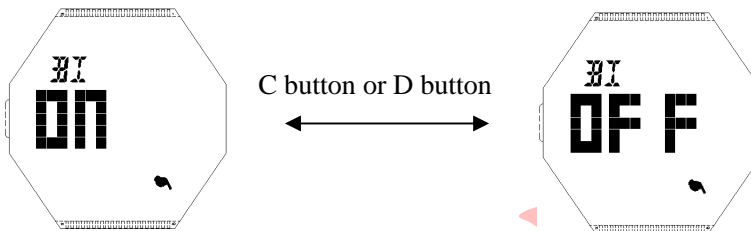
- In world time mode, the watch will automatically lock the buttons if you do not perform any button within 10 seconds.
- In alarm mode, the watch will automatically lock the buttons if you do not perform any button within 10 seconds, and then return to normal time mode.
- In countdown timer mode, if you do not perform any button when stopwatch is running, the watch will not automatically lock.
- In countdown timer mode, if you do not perform any button within 3 minutes when stopwatch is stopped, the watch will automatically lock.
- When the watch is unlocked, in any mode, EL backlight will illuminates for 3 seconds by touching A button.
- In unlocked mode, touch B button to select operation mode.

1. To set time and date

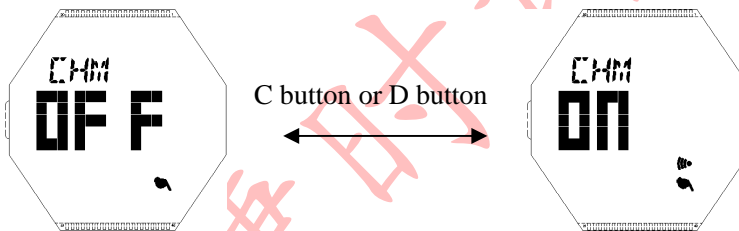
- In normal time unlocked mode, hold down C for 2 seconds, “Time zone” starts to flash, which indicates time setting, touch B button to select other setting items in sequence as below:



- Touch D button to adjust time zone upward, hold down D button for 3 seconds to fast adjust.
- Touch C button to adjust time zone downward, hold down C for 3 seconds to fast adjust.
- Touch D button or C button to turn on / off daylight saving time (DST). If daylight saving time has been turned on, the indicator of “DST” will display on the screen.
- Touch D button to increase the flashing values, hold down D button for 3 seconds to fast increase.
- Touch C button to decrease the flashing values, hold down C button for 3 seconds to fast decrease.
- Seconds reset to zero by touching C button or D button.
- Touch C button or D button to select 12-hour / 24-hour format.
- Touch C button or D button to turn on / off the button tone.



- Touch C button or D button to turn on / off hourly time signal (🔊).



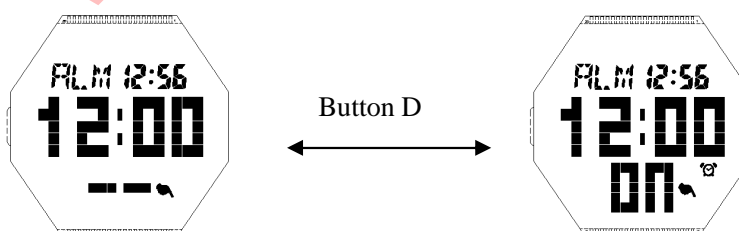
- Hold down B button for 2 seconds to confirm, and then exit from setting.
- The watch will exit from setting if you do not perform any button within 30 seconds, and then return to normal time locked mode in 10 seconds.

Please note that:

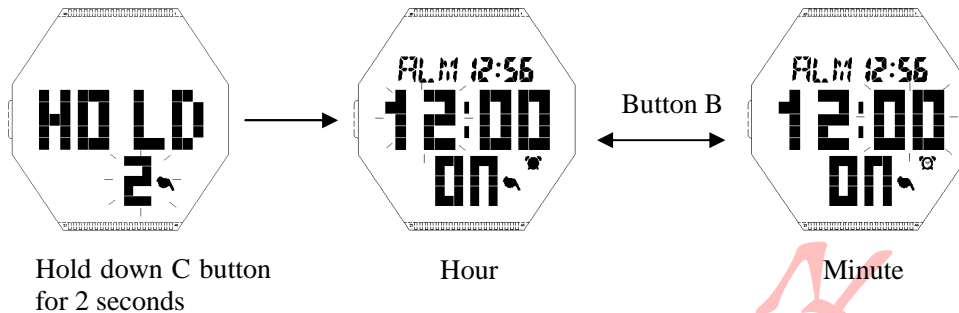
In this setting mode, if you turn on / off daylight saving time (DST) after selecting time zone, the time zones which belong to home city will not synchronously to turn on / off the daylight saving time (DST) automatically.

2. Alarm mode

To turn on / off the alarm: In alarm display mode, touch D button to turn on / off alarm. When alarm is turned on, alarm indicator (🔔) will display on the screen.




To set the alarm time: In alarm display mode, hold down C button for 2 seconds, “Hour” starts to flash, which indicates alarm time setting, then touch B button to select other flashing setting items in sequence as below:



- Touch D button to increase the flashing values, hold down D button for 3 seconds to fast increase.
- Touch C button to decrease the flashing values, hold down C button for 3 seconds to fast decrease.
- Hold down B button for 2 seconds to confirm, and then exit from setting.
- The watch will exit from setting if you do not perform any button within 30 seconds, and then return to normal time locked mode in 10 seconds.
- When alarm time is reached, alarm tone will sound with BB-BB for 20 seconds. Touch any button to stop alarm tone after it starts to sound.
- When alarm starts to sound, and you do not perform any button, alarm tone will sound for 20 seconds every 20 seconds, and sound for 3 times in total. Press any button to stop alarm tone after it starts to sound.



3. Stopwatch mode

- The display range of the stopwatch is 23hours,59 minutes, 59.99 seconds.
- In stopwatch mode, touch D button to start / stop stopwatch, stopwatch indicator () will flash when stopwatch runs, but if stopwatch stops, seconds will reset to zero by touching C button.

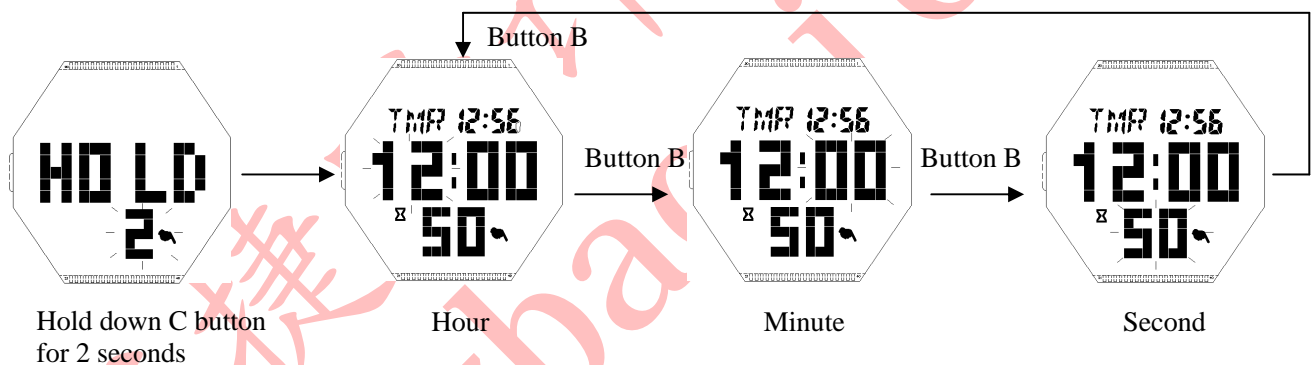


- When stopwatch runs, touch B button to exit stopwatch mode, stopwatch will run at the background, and stopwatch indicator (ST/STP) will flash on the screen. The watch will automatically lock if you do not perform any button within 10 seconds.
- If you want to make the stopwatch stop, you should release buttons first, then touch B button to select counting mode, and touch D to stop counting. The watch will automatically lock if you do not perform any button within 10 seconds, then return to normal time locked mode.
- In stopwatch mode, if you do not perform any button when stopwatch is running, the watch will not automatically lock.
- The stopwatch will automatically stop running when reaches its limit (23 hours, 59 minutes, 59.99 seconds).

4. Countdown timer mode

- The display range of countdown timer is: from 00 hour, 00 minute, 01 second to 23 hours, 59 minutes, 59 seconds.
- In stopwatch mode, press D button to start / stop counting down, countdown indicator () will flash on the screen when it is counting down.
- If you don't want to stop counting down, press B button to exit from countdown timer mode, countdown timer will still run at the background, and countdown indicator () will flash on the screen. The watch will automatically lock if you do not perform any button within 10 seconds.
- If you want to stop counting down, you should release buttons first, then touch B button to select counting mode, and touch D to stop counting. The watch will automatically lock if you do not perform any button within 10 seconds, then return to normal time locked mode.
- The watch will not automatically lock when countdown timer is running.
- When countdown timer reaches to 0, the watch will sound with BB-BB for 10 seconds.
- Touch any button to stop tone after it starts to sound.

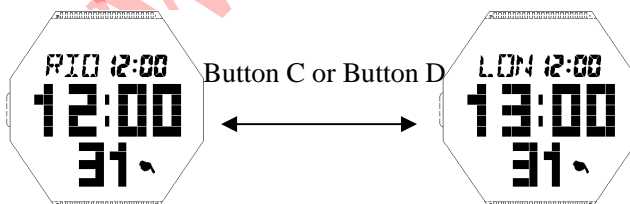
To set countdown time: In countdown timer mode, hold down C button for 2 seconds to enter countdown time setting. At this time, "Hour" starts to flash, then touch B button to set countdown time in sequence as below:



- Touch D button to increase the flashing values, hold down D button for 3 seconds to fast increase.
- Touch C button to decrease the flashing values, hold down C button for 3 seconds to fast decrease.
- Hold down B button for 2 seconds to confirm, and then exit from setting.
- The watch will exit from setting if you do not perform any button within 30 seconds, and then return to normal time locked mode in 10 seconds.

5. World time mode

- When enter world time unlocked mode, 24 time zones and 32 cities can be viewed.



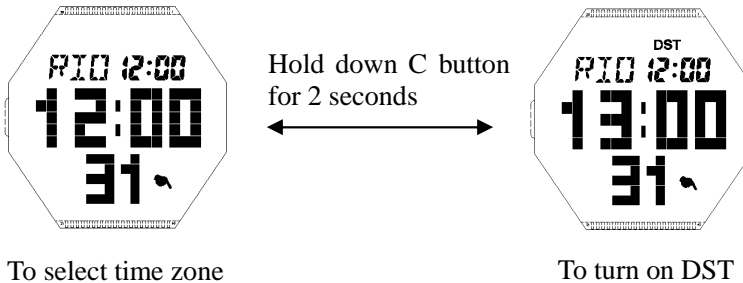
- Touch D button to view world city time upward, hold down D button for 3 seconds to fast view.
- Touch C button to view world city time downward, hold down C button for 3 seconds to fast view.
- The watch will automatically lock the buttons if you do not perform any button within 10 seconds, and then display world time mode.

City Code Table:

City Code	City	GMT Differential	Other major cities in same time zone
LON	London	00. 0	Dublin, Lisbon Casablanca, Dakar, Abidjan
PAR	Paris	+01. 0	, Milan Rome,Madrid,Amsterdam,Algiers.Hamburg, Frankfurt,Vienna,Stockhoim,Berlin.
MAD	Madrid	+01. 0	
ROM	Rome	+01. 0	
BER	Berlin	+01. 0	
IST	Istanbul	+02. 0	Helsinki, Beirut, Damascus, Frankfurt, Vienna, Stockholm, Athens, Istanbul, Capetown, Cairo
CAI	Cairo	+02. 0	
MOW	Moscow	+03. 0	Kuwait Riyadh, Aden, Addis Ababa, Nairobi, Moscow
DXB	Dubai	+04. 0	Abu Dhabi, Muscat
KHI	Karachi	+05. 0	MV Maldives
DEL	Delhi	+05. 5	Mumbai, Kolkata, New Delhi
DAC	Dacca	+06. 0	Colombo
BKK	Bangkok	+07. 0	Jakarta,Phnom Penh, Hanoi, Vientiane
SIN	Singapore	+08. 0	Singapore Kuala Lumpur, Beijing, Taipei, Manlla, Perth, Ulaanbaatar, Hongkong
HKG	Hongkong	+08. 0	
TYO	Tokyo	+09. 0	
GUM	Guam	+10. 0	Melboume, Guam, Rabaul
SYD	Sydney	+10. 0	
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	-8. 0	San Francisco, Las Vegas, Vancouver, Seattle/Tacoma, Los Angeles
LAX	Los Angeles	-8. 0	
DEN	Denver	-7. 0	Edmonton
MEX	Mexico City	-6.0	Houston, Dallas, Voss burg, New Orleans, Mexico City,Winnipeg, Chicago
CHI	Chicago	-6. 0	
MIA	Miami	-5. 0	Montreal, Detroit, Miami, Boston, Havana, Lima, Bogota, New York
NYC	New York	-5. 0	
SAN	Santiago	-4. 0	Lapaz, Santiago, Port of Spain
RIO*	Rio de Janeiro	-3. 0	Sao Paulo, Buenos Aires, Brasilia, Montevideo

6. To set daylight saving time (DST)

- In world time unlocked mode, hold down D button for 2 seconds to turn on / off daylight saving time (DST).



- Touch D button to adjust time zone upward, hold down D button for 3 seconds to fast adjust.
- Touch C button to adjust time zone downward, hold down C button for 3 seconds to fast adjust.
- Hold down D button for 3 seconds to turn on / off daylight saving time (DST), if daylight saving time has been turned on, the indicator of “DST” will display on the screen.
- The watch will automatically lock the buttons if you do not perform any button within 10 seconds.
- If the DST is turned on / off in the time zones which belong to home city, the daylight saving time will not be synchronously turned on / off automatically in normal time mode.

7. Operating instruction of touch screen

- Touch screen is through body motion to induce signal, and then transmit to the watch module control. When release the buttons, if the surface of screen is touched by the objects which are similar to our body, such as: water, metal, strong electromagnetic transmits etc, that will activate the buttons-lock or change the watch functional mode. If some button-pressed area of the screen is touched by above mentioned object for long time, the touch screen will not be able to work, and it will recover to work by moving the object in one minute.
- If the watch is in high humidity condition(over 90%) for a long time, which will coagulate and become water on the surface of the touch screen, and cause the touch screen will not be able to work, it will recover to work by cleaning the water in one minute.
- After replacing battery or watchcase, this watch will check hardware and adjust the sensitivity of buttons automatically, touch screen will enter to normal state in one minute.

C. Specification

- Module dimension : $\Phi 33.2\text{mm}$
- Module thickness (buzzer inclusive) : 8.5mm
- Working temperature range : $-10^{\circ}\text{C} \sim +60^{\circ}\text{C}$
- Working voltage : 3.0V
- Time accuracy : $\pm 60 \text{ sec/month}$
- Battery code and capacity : CR2032 (Capacity: 220m Ah)
- Static average current : $\leq 8.06 \mu\text{A}$ (Static maximum current: 32.00 μA)
- Alarm average current : $\leq 5.56 \text{mA}$ (Alarm maximum current: 18.0mA)
- Average current of EL illumination : $\leq 9.01 \text{mA}$ (Maximum current of EL illumination: 12.0mA)
- Battery life (90%) : $\geq 18 \text{ months}$ (Japan lithium)

According these standards to calculate battery life: EL backlight illuminates 4 times (12 seconds) per day, alarm tone sounds once (60 seconds) per day.

	Prepared	Checked	Approved
Name	冯碧颜	赵星亮	宋检望
Date	11/12/09	11/12/09	11/12/09