

1. Feature list

Time / Date

- Two Time Zones
- Hour, Minute, Second display in 12H or 24H format
- Month, Date and Day of Week display
- Auto Day of week calculation

Timer

- Count Down Timer
- Maximum preset time can be 23:59.59

Chronograph

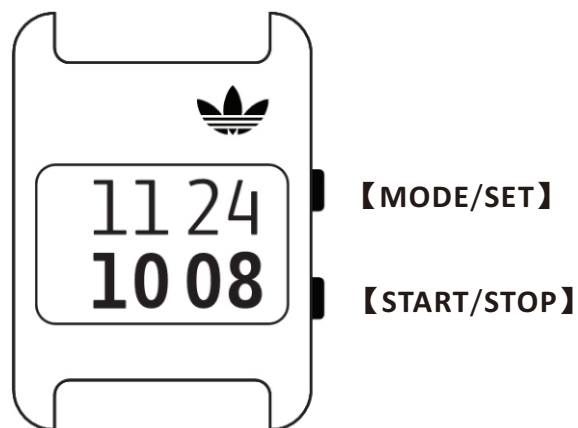
- 1/100 second resolution Chronograph

Backlight

- 2 seconds EL Backlight
- Night-Light function,
When this function is enable, any key depression will turn on backlight
for 2 seconds
After 1 hour, this NM function will be disabled automatically

2 · Display and Buttons description

The module full display and button description as below



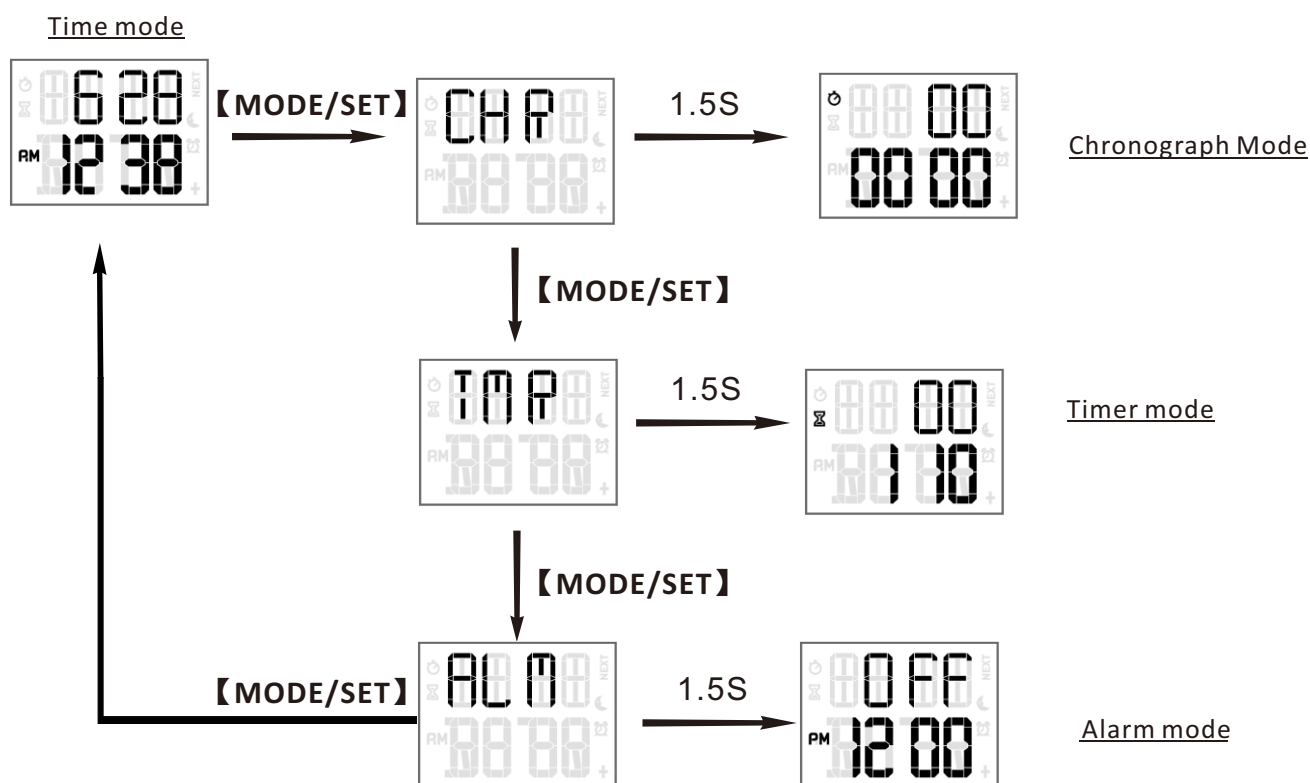
3. Module Reset flow (Power On, Hardware or Software Reset)

Actions on this module during reset as below:

Sound self-checking → Full display for 2 seconds → Normal Time & Date display

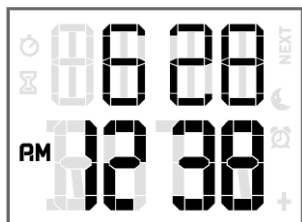
4. Mode Architecture

By depression of button **【MODE/SET】** can select different function mode as below:



(Noted: Alarm function is optional, enable/disable by bond option)

5. Operation in Time mode



Hour/Minute/Month/Date

OR



Hour/Minute/Day of Week

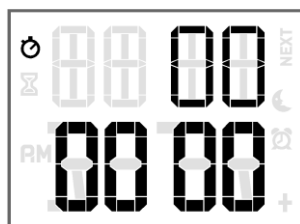
OR



Hour/Minute/Second

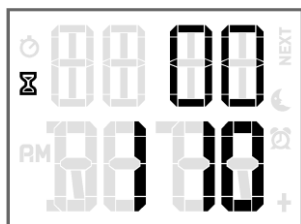
- Press button **【MODE/SET】** will change to Chronograph mode
- There are three display pictures in Time mode, these are:
 - Picture 1: Display Hour / Minute / Month / Date
 - Picture 2: Display Hour / Minute / Day of Week
 - Picture 3: Display Hour / Minute / Second
- Press button **【START/STOP】** can change the display from above three pictures
- Press and hold button **【START/STOP】** for 2 seconds will toggle current display time zone between T1 and T2
- Press and hold button **【MODE/SET】** will enter Time Set state, in this state, press button **【START/STOP】** will increase the setting value, and press button **【MODE/SET】** continuously will change set item as the sequence Time zone → Hour → Minute → Second → Year → Month → Date → Hour Format → Hourly Chime(Same as Aert function, Optional) → Button Beep
- In Time set state, press and hold button **【MODE/SET】** 3 seconds will exit Set state

6. Operation in Chronograph mode



- When current the display is Chronograph mode title, press button **【MODE/SET】** will change to next mode Timer
- Press button **【MODE/SET】** in normal Chronograph time display state will return to Time display mode.
- When Chronograph is Reset or Stopped, press button **【START/STOP】**, chronograph will start run.
- In chronograph running state, press button **【START/STOP】**, chronograph is stopped, press this Button again, chronograph will resume running.
- In chronograph stopped state, press and hold button **【START/STOP】** for 2 seconds will clear all running time to zero, which is called Reset

7. Operation in Timer mode



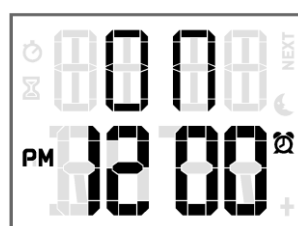
- When current display of Timer mode banner, press button **【MODE/SET】** will change to Alarm mode if Alarm mode is enable by bond or return to Time display mode.
- In Timer normal time display state, press button **【MODE/SET】** will return to Time display Mode.
- In Timer Reset or Stopped state, if the preset time is not zero, press button **【START/STOP】** Timer will start run immediately.
- In Timer running state, press button **【START/STOP】**, Timer is stopped.
- When Timer is stopped, press and hold button **【START/STOP】** 3 seconds will set running time to preset value, which is called Reset.
- In Timer Reset state, press and hold button **【MODE/SET】** will enter Timer set state, in this State, press button **【START/STOP】** will increase setting value, and press button **【MODE/SET】** continuously will change set item as sequence Hour → Minute → Second
- In Timer set state, press and hold button **【MODE/SET】** for 3 seconds will exit set state

8. Operation in Alarm mode (Optional)



(Alarm Off)

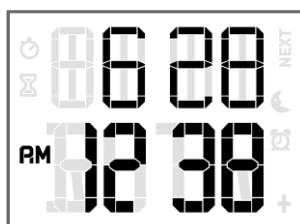
or



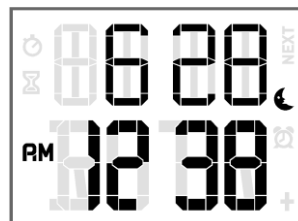
(Alarm On)

- In Alarm mode, no any button action for 3 minutes will return to Time display mode automatically
- Press button **【MODE/SET】** will change to Time display mode
- Press button **【START/STOP】** will turn on or turn off Alarm
- Press and hold button **【MODE/SET】** will enter Alarm set state, in this state, press button **【START/STOP】** increase the setting value, and press button **【MODE/SET】** continuously will change set item between Hour and Minute.
- In Alarm set state, press and hold button **【MODE/SET】** will exit Alarm set state.

9. Operation of Night-Light function mode



(Night-Light mode OFF)



(Night-Light mode On)

- In any mode, press two buttons 【MODE/SET】 and 【START/STOP】 at the same time will active backlight for 2 seconds
- Press and hold these two buttons 【MODE/SET】 and 【START/STOP】 for 3 seconds will enable or disable Night-Light function.
- When Night-Light function is enabled, press of any button will active backlight for 2 seconds.
- When Night-Light function is enabled, after one hour, this function is disabled automatically.

10. Specification

- | | |
|-------------------------------|--------------------------------|
| ➤ Module Size | 23.60 x 22.00 mm |
| ➤ Moudle Thickness | 6.95mm (Include Buzzer plate) |
| ➤ Working Temperature | -10℃~60℃ |
| ➤ Working Voltage | 3.0V |
| ➤ Time Accuracy | +/-30 Seconds per month |
| ➤ Battery | CR1620 (80mAh) |
| ➤ Standby Current | <= 2.1uA |
| ➤ Alarm average Current | <= 3.9mA |
| ➤ ELbacklight average Current | <= 5.34mA |
| ➤ Estimate Battery life (90%) | >=24 months |

Noted: Conditions of battery life calculation:

- Turn on backlight 4 times per day and keep 3 seconds on time for each
- One time Alarm alert per day and alert time is 60 seconds
- Chronograph run one hour per day