## EC1515B Electronic clock instructions manual vo512

## Because the product features more, please read this manual carefully, thank you for your cooperation!

## Function introduction:

Digital tube display: On the electric silence that time, temperature, year, month, day, week round display, through the button can be set to display only time or display the time and temperature (in the "time display settings").
LED Display: There are 12 kinds of display, can close the display can be displayed through the button switch. Also can set the button to automatically switch the display (in the "LED automatic switch setting display mode" setting), when the LED switch display parameter $x$ is less than 60 , switch the display time is $x^{*} 1$ minutes, when more than 60 , switch the display time for ( $\mathrm{X}-60$ ) *60 minutes, when $x=0$ does not automatically switch display.
Time Setting: Can be set time by key .
Hourly Chime: Can be open or closed, can set the time period by button (for example, can be set to 8 in the morning to 22 o'clock in the evening time, the other time is not hourly chime). Can be set rings.
Alarm: There are 4 alarm clock, can be turned off or on, can be set the length of alarm time and alarm rings.
The first alarm clock for ordinary, when opened will be alarm every day.
The second alarm clock for the workday, when open every Monday to Friday alarm, Saturday and Sunday no alarm.
The Third alarm clock for the weekend, when open Saturday and Sunday alarm, Monday to Friday no alarm.
The fourth is a single alarm clock, when open only alarm one times.
Temperature Display: Measuring ambient temperature with thermistor.The default is the degree Celsius display, can be set by the key to Fahrenheit display.When the temperature is not allowed to do when the temperature calibration (in the "temperature calibration settings") (for example: when the display temperature is 3 degrees higher than the actual temperature, the temperature calibration value can be set to -3).
Light Control: Measurement of ambient brightness with photosensitive resistors. When the ambient light becomes dark, it will automatically reduce the brightness of the clock. Light level is set to how ambient brightness to reduce the brightness of the clock(have $-2,-1,0,1,2$, a total of 5 levels).
$\mathbf{1 2 / 2 4}$ hour system: The default is 24 hours, can be set by the button for the display of 12 hours (in the " $12 / 24$ hours set mode"). Restore factory default settings: the clock power off and remove the memory battery, waiting for a minute or so, and then the clock on the power can be.

## Some errors in welding:

1, Clock chip (DS1302) no welding or welding error. Show "Eor1".
2, Thermistor (temperature measurement circuit) no welding or welding error. Show "Eor2".
3, Photosensitive resistor (metering circuit) without welding or welding error. Show "Eor3".

## Electrical performance:

Power supply: DC3V~DC5V
Working current: <40MA
Alarm current: <70mA

Electronic clock display and key function
Time display:

|  | Display description | MODE key function in mode | PLUS key function in mode |
| :---: | :--- | :--- | :--- |
| Time display | There are 3 display modes: 1, <br> time, temperature, year, | 1, short press, enter the time <br> setting mode. <br> mode (power <br> on default <br> mode) | month, day, week round <br> display. 2, time, temperature <br> wheel display. 3, only display <br> time. | | 1, the first round of temperature, year, |
| :--- |
| hourly chime and alarm |
| settings. |
| 3, Long press 5 seconds to enter |$\quad$| month, day, week. |
| :--- |
| 2, Hold down the MODE key and then |
| press the PLUS key to switch LED display |
| style (a total of 12 display styles), and can |
| turn off the LED display. |

## Time Setting:

It can modify the time of the clock, in each setting if more than 10 seconds without any key press, then automatically returns the time display, and restore the time before.

| Mode | Display description | PLUS key function in mode | MODE key function in mode |
| :---: | :---: | :---: | :---: |
| Time display mode |  |  | Short press enter (year set mode) |
| Year Set Mode | Four digital tube flashing shows "Year" | Set "Year", long press can quickly set | Into next mode (Month set mode) |
| Month Set Mode | front two tube flashing shows "Month", after two tube always shows "Day" | Set "Month", long press can quickly set | Into next mode (Day set mode) |
| Day Set Mode | Front two tube always shows "Month", after two tube flashing shows "Day" | Set "Day", long press can quickly set | Into next mode (Hour set mode) |
| Hour Set Mode | Front two tube flashing shows "Hour", after two tube always shows "H" when 24 hour system, when 12 hour system shows " $A$ " in am, shows " $P$ " in pm. | Set "Hour", long press can quickly set | Into next mode (Minute set mode) |
| Minute Set Mode | Front two tube always shows "Hour", after two tube flashing shows "Minute" | Set "Minute", long press can quickly set | If there is a time to adjust, save the settings, otherwise not save the settings, and return time display mode. |

## Hourly Chime and Alarm Setting:

It can be set hourly Chime and 4 alarm clocks, each setting mode, press the MODE button for 3 seconds or 10 seconds without any button is pressed, will automatically return time display mode.

| Mode | Display description | PLUS key function in mode | MODE key function in mode |
| :---: | :--- | :--- | :--- |
| Time Display Mode |  | Press the MODE button 3 seconds <br> to enter (the hourly chime switch <br> mode) |  |
| Hourly Chime Switch <br> Mode | Front two tube always shows <br> "01", after two tube flashing <br> shows "On" or "OF" to express <br> open or close the hourly chime | Open or close the hourly <br> chime | Into next mode (Hourly Chime Star <br> Time Mode) |


| Hourly Chime Star Time Mode | Front two tube always shows "02", after two tube flashing shows hourly chime star time | Set star time(for example: the start time is set to 8 , the end time is set to 22 , the day of 8 o'clock to 22 o'clock will be hourly chime) | Into next mode (Hourly Chime End Time Mode) |
| :---: | :---: | :---: | :---: |
| Hourly Chime End Time Mode | Front two tube always shows "03", after two tube flashing shows hourly chime end time | Set end time(for example: the start time is set to 8 , the end time is set to 22 , the day of 8 o'clock to 22 o'clock will be hourly chime) | Into next mode (Hourly Chime Rings Set Mode) |
| Hourly Chime Rings Set Mode | Front two tube always shows "04", after two tube flashing shows the serial number of the rings | Set hourly chime rings (have 7 rings) | Into next mode (Alarm clock 1 switch setting mode) |
| Alarm clock 1 switch setting mode | Front two tube always shows "05", after two tube flashing shows "ON" or "OF" express open or close the alarm clock 1 | Open or close alarm clock 1 | Into next mode (the hour set for alarm clock 1 mode) |
| Hour Set For Alarm Clock 1 | Front two tube always shows "06", after two tube flashing shows the hour of alarm 1 | Set the hour of alarm 1,long press can quickly set | Into next mode (the minute set for alarm clock 1 mode) |
| Minute Set For Alarm Clock 1 | Front two tube always shows "07", after two tube flashing shows the minute of alarm 1 | Set the minute of alarm 1,long press can quickly set | Into next mode (the alarm time length set for alarm clock 1) |
| Alarm Time Length Set For Alarm Clock 1 | Front two tube always shows "08", after two tube flashing shows the alarm time length of alarm 1 | Set the alarm time length of alarm 1,Set range of $1 \sim 20$ minutes | Into next mode (the rings set for alarm clock 1) |
| Rings Set For Alarm clock 1 | Front two tube always shows "09", after two tube flashing shows the serial number of the rings for alarm 2 | Set alarm 1 rings (have 7 rings) | Into next mode (Alarm clock 2 switch setting mode) |
| Alarm clock2 switch setting mode | Front two tube always shows "10", after two tube flashing shows "ON" or "OF" express open or close the alarm clock 2 | Open or close alarm clock 2 | Into next mode (the hour set for alarm clock 2 mode) |
| Hour Set For Alarm Clock 2 | Front two tube always shows "11", after two tube flashing shows the hour of alarm 2 | Set the hour of alarm 2,long press can quickly set | Into next mode (the minute set for alarm clock 2 mode) |
| Minute Set For Alarm Clock 2 | Front two tube always shows "12", after two tube flashing shows the minute of alarm 2 | Set the minute of alarm <br> 2,long press can quickly set | Into next mode (the alarm time length set for alarm clock 2) |
| Alarm Time Length <br> Set For Alarm Clock 2 | Front two tube always shows " 13 ", after two tube flashing shows the alarm time length of alarm 2 | Set the alarm time length of alarm 2,Set range of 1 ~ 20 minutes | Into next mode (the rings set for alarm clock 2) |
| Rings Set For Alarm clock 2 | Front two tube always shows " 14 ", after two tube flashing shows the serial number of the rings for alarm 2 | Set alarm 2 rings (have 7 rings) | Into next mode (Alarm clock 3 switch setting mode) |


| Alarm clock 3 switch setting mode | Front two tube always shows "15", after two tube flashing shows "ON" or "OF" express open or close the alarm clock 3 | Open or close alarm clock 3 | Into next mode (the hour set for alarm clock 3 mode) |
| :---: | :---: | :---: | :---: |
| Hour Set For Alarm Clock 3 | Front two tube always shows " 16 ", after two tube flashing shows the hour of alarm 3 | Set the hour of alarm 3,long press can quickly set | Into next mode (the minute set for alarm clock 3 mode) |
| Minute Set For Alarm Clock 3 | Front two tube always shows "17", after two tube flashing shows the minute of alarm 3 | Set the minute of alarm <br> 3,long press can quickly set | Into next mode (the alarm time length set for alarm clock 3) |
| Alarm Time Length <br> Set For Alarm Clock 3 | Front two tube always shows " 18 ", after two tube flashing shows the alarm time length of alarm 3 | Set the alarm time length of alarm 3,Set range of $1 \sim 20$ minutes | Into next mode (the rings set for alarm clock 3) |
| Rings Set For Alarm clock 3 | Front two tube always shows "19", after two tube flashing shows the serial number of the rings for alarm 4 | Set alarm 3 rings (have 7 rings) | Into next mode (Alarm clock 4 switch setting mode) |
| Alarm clock 4 switch setting mode | Front two tube always shows " 20 ", after two tube flashing shows "ON" or "OF" express open or close the alarm clock 4 | Open or close alarm clock 4 | Into next mode (the hour set for alarm clock 4 mode) |
| Hour Set For Alarm Clock 4 | Front two tube always shows " 21 ", after two tube flashing shows the hour of alarm 4 | Set the hour of alarm 4,long press can quickly set | Into next mode (the minute set for alarm clock 4 mode) |
| Minute Set For Alarm Clock 4 | Front two tube always shows "22", after two tube flashing shows the minute of alarm 4 | Set the minute of alarm <br> 4,long press can quickly set | Into next mode (the alarm time length set for alarm clock 4) |
| Alarm Time Length <br> Set For Alarm Clock 4 | Front two tube always shows " 23 ", after two tube flashing shows the alarm time length of alarm 4 | Set the alarm time length of alarm 4,Set range of $1 \sim 20$ minutes | Into next mode (the rings set for alarm clock 4) |
| Rings Set For Alarm clock 4 | Front two tube always shows " 24 ", after two tube flashing shows the serial number of the rings for alarm 4 | Set alarm 4 rings (have 7 rings) | return time display mode. |

## Function Setting:

each setting mode, press the MODE button for 3 seconds or 10 seconds without any button is pressed, will automatically return time display mode.

| Mode | Display description | PLUS key function in mode | MODE key function in mode |
| :---: | :---: | :---: | :--- |
| Time Display Mode |  | Press the MODE button 5 <br> seconds to enter (light <br> control switch mode) |  |
| Light Control Switch <br> mode | Front two tube always shows <br> "1", after two tube flashing <br> shows "ON" or "OF" express <br> open or close the light control | open or close the light control | Into next mode (the light <br> control level settings) |


| Light Control Level Settings | Front two tube always shows " 2 ", after two tube flashing shows the light level | Set light control level(There are -2, $-1,0,1,2$ a total of 5 grades) | Into next mode (Fahrenheit temperature display switch settings) |
| :---: | :---: | :---: | :---: |
| Fahrenheit <br> Temperature Display Switch Settings | Front two tube always shows " 3 ", after two tube flashing shows "ON" or "OF" express Fahrenheit or Centigrade display | Set Fahrenheit or Centigrade display | Into next mode <br> (temperature calibration <br> setting mode)  |
| Temperature Calibration Setting Mode | Front two tube always shows "4 ", after two tube flashing shows temperature calibration value | Set temperature calibration value, Range from -9 to 10.(For example, when the display temperature is 3 degrees higher than the actual temperature, the calibration value can be set to -3). | Into next mode (12/24 hour display setting mode) |
| 12/24 Hour Display Setting Mode | Front two tube always shows " 5 ", after two tube flashing shows "ON" or "OF" express 12 hour or 24 hour display | Set 12/24 hour display | Into next mode (time display setting mode) |
| Time Display Setting Mode | Front two tube always shows " 6 ", after two tube flashing shows round display mode | Set round display mode (have 3 kinds), 0 : only display time. 1 : time, temperature, year, month, day, week round display. 3: time and temperature round display. | Into next mode (LED auto switch display setting mode) |
| LED Auto Switch Display Setting Mode | Front two tube always shows " 6 ", after two tube flashing shows LED auto switch value | Set LED auto switch value (0 for fixed display). For example, when set to 30 , switch to the next display every 30 minutes. When set to 62 (greater than 60 ), each ( $62-60$ ) ${ }^{* 60}$ minutes (i.e., 2 hours) is switched to the next display. | return time display mode. |

