

# EC1515B Electronic clock instructions manual V0513

**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  $(X-60)*60$  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.

**Ring:** use buzzer output music.7 rings can be set as a alarm rings and hourly chime rings.

**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 calibration is set to how ambient brightness to reduce the brightness of the clock(have -2, -1, 0, 1, 2, a total of 5 value).

**12/24 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
<b>Time display mode (power on default mode)</b>	There are 3 display modes: 1, time, temperature, year, month, day, week round display. 2, time, temperature wheel display. 3, only display time.	1, short press, enter the time setting mode. 2, long press 3 seconds into the hourly chime and alarm settings. 3, Long press 5 seconds to enter the function settings.	1, the first round of temperature, year, 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
<b>Time display mode</b>			Short press enter (year set mode)
<b>Year Set Mode</b>	Four digital tube flashing shows "Year"	Set "Year", long press can quickly set	Into next mode (Month set mode)
<b>Month Set Mode</b>	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)
<b>Day Set Mode</b>	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)
<b>Hour Set Mode</b>	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)
<b>Minute Set Mode</b>	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
<b>Time Display Mode</b>			Press the MODE button 3 seconds to enter (the hourly chime switch mode)
<b>Hourly Chime Switch Mode</b>	Front two tube always shows "01", after two tube flashing shows "On" or "OF" to express open or close the hourly chime	Open or close the hourly chime	Into next mode (Hourly Chime Star Time Mode)

<b>Hourly Chime Star Time Mode</b>	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)
<b>Hourly Chime End Time Mode</b>	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)
<b>Hourly Chime Rings Set Mode</b>	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)
<b>Alarm clock 1 switch setting mode</b>	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)
<b>Hour Set For Alarm Clock 1</b>	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)
<b>Minute Set For Alarm Clock 1</b>	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)
<b>Alarm Time Length Set For Alarm Clock 1</b>	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 ~ 20 minutes	Into next mode (the rings set for alarm clock 1)
<b>Rings Set For Alarm clock 1</b>	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)
<b>Alarm clock2 switch setting mode</b>	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)
<b>Hour Set For Alarm Clock 2</b>	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)
<b>Minute Set For Alarm Clock 2</b>	Front two tube always shows "12", after two tube flashing shows the minute of alarm 2	Set the minute of alarm 2,long press can quickly set	Into next mode (the alarm time length set for alarm clock 2)
<b>Alarm Time Length Set For Alarm Clock 2</b>	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)
<b>Rings Set For Alarm clock 2</b>	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)

<b>Alarm clock 3 switch setting mode</b>	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)
<b>Hour Set For Alarm Clock 3</b>	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)
<b>Minute Set For Alarm Clock 3</b>	Front two tube always shows “17”, after two tube flashing shows the minute of alarm 3	Set the minute of alarm 3, long press can quickly set	Into next mode (the alarm time length set for alarm clock 3)
<b>Alarm Time Length Set For Alarm Clock 3</b>	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 ~ 20 minutes	Into next mode (the rings set for alarm clock 3)
<b>Rings Set For Alarm clock 3</b>	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)
<b>Alarm clock 4 switch setting mode</b>	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)
<b>Hour Set For Alarm Clock 4</b>	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)
<b>Minute Set For Alarm Clock 4</b>	Front two tube always shows “22”, after two tube flashing shows the minute of alarm 4	Set the minute of alarm 4, long press can quickly set	Into next mode (the alarm time length set for alarm clock 4)
<b>Alarm Time Length Set For Alarm Clock 4</b>	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 ~ 20 minutes	Into next mode (the rings set for alarm clock 4)
<b>Rings Set For Alarm clock 4</b>	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
<b>Time Display Mode</b>			Press the MODE button above 5 seconds to enter (light control switch mode)
<b>Light Control Switch mode</b>	The first tube always shows “1”, after two tube flashing shows “ON” or “OF” express open or close the light control	open or close the light control	Into next mode (the light control level settings)

<b>Light Control Level Settings</b>	The first 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)
<b>Fahrenheit Temperature Display Switch Settings</b>	The first 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 (temperature calibration setting mode)
<b>Temperature Calibration Setting Mode</b>	The first 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)
<b>12/24 Hour Display Setting Mode</b>	The first 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)
<b>Time Display Setting Mode</b>	The first 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)
<b>LED Auto Switch Display Setting Mode</b>	The first tube always shows “7 ”, 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.