

## 1. Product parameters

Name : 1624 Color LED Music Spectrum  
 Model : CAI-256\_V6.59 version  
 Product size: 10 columns, 24 rows, a total of 384 RGB LED display  
 Product size: length 21.8cm . width 2.8cm . height 7.2cm  
 Net weight : 190g  
 Power supply mode: USB power supply, 0.9m power supply line, no power supply, can be powered by 5V mobile phone charger; no charging function.  
 Working voltage : 5V  
 Working current : 600mA  
 Main functions: 20 display modes, 7 total color modes, 8 brightness settings, 4 time display modes, 1 breathing display mode, 2 alarm clock functions, 1 night dim function.

## 2. Connection method

Connect the USB cable to the 5V power supply and use a mobile phone charger or a USB power-supply device. The screen displays the version number such as V6.01 when the power is turned on, and then goes out. As long as there is a sound in the voice control, it will jump to it. If you need to use the audio cable to control, insert the audio cable into the headphone jack, and it will automatically switch to the wire control mode. When using voice control, try to be as close to the speaker as possible, the sound sensor is on the back of the spectrum, and there should be no obstructions between the sensor and the speaker. When using voice control, external noise or speech sound will be received and displayed by the spectrum.

The sensitivity of the sound can be controlled by adjusting the volume of the sound and can also be changed by setting the sensitivity.

Special note: It is not possible to connect the speaker cable directly to the phone input of the spectrum.

### 3. Button description (short press and long press)



Long press: Press and hold the switch for about 3 seconds (you will hear a beep), then the setting interface will pop up.

Short press: It is to press the switch quickly and release it (you will hear a beep as well), and then the setting interface will pop up.

Exit setting: Press another button to exit the current setting, or automatically exit after 8 seconds. The settings are automatically saved when you exit.

Mode 1: RW2

### 4. Time setting

Long press button 1 and release it when you hear a beep ; the time setting interface is displayed. Then continuously short press the button to modify the hour value.	Press and hold button 1 again , and release it when you hear a beep : the setting interface is completed, press another key (key 2 ) to exit, or automatically exit after 8 seconds.
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## Five, display mode settings (a total of 20 display modes)

Operation method: short press the button 1 , the display interface with numbers in the figure below will pop up ( automatically close in 1 second), and each press switches a mode. For example, if you press 01 to display the interface, you will set the float + column display mode.

Mode 1 : buoy + vertical real-time display mode	Mode 2 : buoy + level display + vertical real-time display mode	Mode 3 : Level display + vertical real-time display mode	Mode 4 : Level display + horizontal real-time display mode
display effect	display effect	display effect	display effect
Mode 5 : Landscape Live View Mode	Mode 6 : buoy + horizontal four groups of combined bar real-time display mode	Mode 7 : Vertical Live View Mode	Mode 8 : Vertical center axis real-time display mode
display effect	display effect	display effect	display effect
Mode 9 : buoy + vertical column real-time display mode	Mode 10 : Vertical buoy real-time display mode	Mode 11 : buoy + horizontal single combination real-time mode	Mode 12 : Lateral Shift Half-Wave Mode
display effect	display effect	display effect	display effect
Mode 13 : Lateral Shift Full Wave Mode	Mode 14 : Vertical real-time mode + full-wave mode (up and down split screen)	Mode 15 : Vertical real-time mode + full-wave mode (left and right split screen)	Mode 16 : buoy + horizontal two groups combined real-time mode
display effect	display effect	display effect	display effect
Mode 17 : Change modes in a fixed order Output: Mode 1 to Mode 16	Mode 18 : Variation of modes in random order Output: Mode 1 to Mode 16	Mode 19 : change in a fixed order: Mode 1-16 , full color or full color or colorful	Mode 20 : change in random order: Mode 1-16 , full color or full color or colorful
display effect	display effect	display effect	display effect

## Six, color mode settings (a total of 7 color settings, 1 spectrum off function)

Operation method: Short press the button 1 , the following Figure will pop up the display interface with numbers ( automatically turn off in 1 second), switch a mode every time you press it. For example, if you press 1 to display the interface, you will set a row or a column of full-color automatic changes.

The difference between full-color and colorful: full-color is richer in color and darker in color. Colorful colors are relatively bright, a total of 7 colors.

Output off: If the output spectrum is off, the time is displayed all the time without being affected by the sound. (If the spectrum is off, you can't turn off the time too, otherwise nothing will be displayed)

Full color one by one, a row or a column of colors gradually and automatically change	Group-by-group full color, four rows or four columns of color gradually change automatically	Full color screen by screen, full screen color changes automatically	Custom Color: Display a fixed color set by yourself
One by one colorful: a row or a column of colors gradually and automatically change	Group-by-group colorful: four rows or four columns of colors gradually and automatically change	Screen-by-screen colorful: full screen color changes automatically	Output off: turn off the spectrum display function.

## 8. Other function settings

Operation method: long press button 1 to enter the setting interface, short press button 1 to modify the value. Press button 2 to exit the setting, or wait 8 seconds to exit the setting automatically.

Set hour value	
Set the minute value	
change duration	
Setting range: 3 seconds to 18 seconds.	
Mirror inversion (for multiple spectral combinations)	
0 : Spectrum is output by default	
1 : Mirror output on the y-axis by default (image flipped upside down)	
Y : Mirror output on the y = x axis by default (image flipped left and right)	
Display optimization settings:	
1 : Choose from the changing 19/20 mode: colorful + full color	
2 : Choose from the changing 19/20 mode: the changing 19/20 mode: colorful	
3 : Only select the color in the changing 19/20 mode: full color	
4 : Optimize shift mode_color, speed up shift	
To set the display speed:	
1 ~ 4 : The larger the value, the higher the display refresh rate and the faster the display.	
Default is 2	
night mode	
Set the time period of night (dark eye protection mode) . the default is off.	
During 0 ~ 1 , which means sleep.	
21~07 means that it is slightly bright From 9:00 pm to 7:00 the next day. Normal brightness at other times	
Brightness adjustment:	
1~7 : levels of brightness adjustment	
A : Bright mode, the brightness is adjusted by the spectral signal strength, the stronger the signal, the higher the brightness	
color modulation:	
Fixed full_color RGR component settings: modulate your favorite colors as needed.	
When R is flashing, short press button 1 to set the red brightness.	
Long press A to Flash, short press button 1 to set blue brightness.	
Long press B to go to the next setting. Or press button 2 to exit.	
Time display numbers:	
0 : Fixed color clock display	
1 : Fixed color hour, minute and second display mode	
2 : Fixed color large font display mode	
A1 : Dynamic color hour, minute and second display method	
A2 : Dynamic color large font display method	
Sensitivity settings:	
1~4 : Detect the input signal strength, the higher the value, the higher the sensitivity	
Default is 2	
Note: If the number is too small, the sensitivity will be very high, and a little interference signal will cause jumping.	
Channel Settings:	
Set left/right touch-panel input	
When using the voice control function, the "channel input" must be set to "left".	
To set the delay:	
When there is no audio input, the time to display the clock is the current number * 3 seconds.	
The default is 2 , multiplied by 3 seconds, that is, the time will be displayed after 6 seconds when there is no audio signal .	
To set the display order:	
1 : Frequency is displayed from low to high	
2 : Frequency is displayed from high to low and the two sides are high display	
The default is from low to high	
To set I~3 alarm clocks:	
The first alarm clock, which means to turn off the alarm clock of this channel, and set it to 1 to turn on the alarm clock of this channel. Followed by time and minutes.	
The default 3 ~ may alarm clock is off.	
Over-clock factory reset:	
In the running state, long press the "button 2 " for more than 3 seconds, the screen will display RST , and there will be a long beep, indicating that the factory settings have been successfully restored.	

key operation	Function settings	Feature options	Function Description	default		
<b>Short press button 1 :</b> Short press: The duration of the key press is between 30ms and 500ms . There is a short beep	Select spectral output mode	Output Mode 1 : Output Mode 2 : Output Mode 3 : Output Mode 4 : Output Mode 5 : Output Mode 6 : Output Mode 7 : Output Mode 8 : Output Mode 9 : Output Mode 10 : Output Mode 11 : Output Mode 12 : Output Mode 13 : Output Mode 14 : Output Mode 15 : Output Mode 16 : Mode sequence changes 17 : The mode changes randomly 18 : Mode color sequence changes 19 : Mode color changes randomly 20 :	Bar + vertical real-time display mode Bar + level display + vertical real-time display mode Level display + vertical real-time display mode Level display + horizontal real-time display mode Landscape Live View Mode Bar + horizontal two groups of combined bar real-time display mode Vertical Live View Mode Vertical center axis real-time display mode Bar + vertical center axis real-time display mode Vertical horizontal real-time display mode Bar + horizontal single combination real-time mode Lateral shift half-wave mode Lateral shift full-wave mode Vertical real-time mode + full-wave mode (up and down split screen) Vertical real-time mode + full-wave mode (left and right split screen) Bar + horizontal two groups combined real-time mode Change mode output in fixed order : mode 1 to mode 16 Change mode output in random order : mode 1 to mode 16 Change in fixed order : mode 1 to 10 , full color or full color or colorful Change in random order : mode 1-10 , full color or full color or colorful	19		
<b>Short press button 2</b>	Select Spectral Color Mode	Color Mode 1 : 1 Color Mode 2 : 2 Color Mode 3 : 3 Color Mode 4 : 4 Color Mode 5 : 5 Color Mode 6 : 6 Color Mode 7 : 7 Color Mode 8 : OFF	Full color one by one : a row or a column of colors gradually and automatically change Group by group full color : four rows or four columns of color gradually change automatically Full color screen by screen : full screen color changes automatically Fixed full color : spectrum / mode / colors are displayed in fixed full color. For the setting method, see "Function Menu Interface Operation" One row or one column : a row or a column of colors gradually and automatically change Group by group colorful : four rows or four columns of colors gradually and automatically change Screen-by-screen colorful : full screen color changes automatically Output off : turn off the spectrum display function	5		
key operation	Function settings	Chinese display	English display	russian	Function Description	default
1. Press and hold button 1 to enter the function setting interface. 2. Short press button 1 to change the setting parameters. 3. Time out for 8 seconds or press button 2 to exit quickly  Long press: the key time is greater than 800ms . Has a long beep	set hour set minutes change duration mirror inversion Display optimization display speed night mode Dimming color modulation time display mode Sensitivity channel input Delay setting display order set alarm 1 set alarm 2	set time set points duration direction optimization Speed DARK brightness R G B TIME:DS SENS CHL DELAY SEQ CLK1 CLK2	ЧАСЫ МИН ВРЕМЯ ЗЕРКАЛЬНО ОПТИМИЗАЦИЯ СКОРОСТЬ ДАРК ЯРКОСТЬ ЦВЕТ ВРЕМЯ:ДС ЧУВСТВИТЕЛЬНОСТЬ ЧАЛ ДЕЛЯЙ ПОСЛЕДОВАТЕЛЬНОСТЬ УСТАНОВКА АЛARМА 1 УСТАНОВКА АЛARМА 2	ЧАСЫ МИН ВРЕМЯ ЗЕРКАЛЬНО ОПТИМИЗАЦИЯ СКОРОСТЬ ДАРК ЯРКОСТЬ ЦВЕТ ВРЕМЯ:ДС ЧУВСТВИТЕЛЬНОСТЬ ЧАЛ ДЕЛЯЙ ПОСЛЕДОВАТЕЛЬНОСТЬ УСТАНОВКА АЛARМА 1 УСТАНОВКА АЛARМА 2	Set hour value Set the minute value In changing output modes 17 and 18 , the time interval for changing each mode, in seconds . Setting range: 3 seconds to 18 seconds 0 : Mirror output on the x-axis by default Y : y - axis mirror output by default 1 : Choose from the changing 19/20 mode, colorful + full color 2 : Only choose the color in the changing 19/20 mode: colorful 3 : Only select the color in the changing 19/20 mode: full color 4 : Optimize shift mode color, speed up shift 1-4 : the larger the value, the higher the display refresh rate Set the time for the night (dim) eye protection mode 1-7 : 7 levels of brightness adjustment A : Breathing mode, the brightness is adjusted by the spectral signal strength, the stronger the signal, the higher the brightness 0 : Turn off the clock display 1 : Fixed color, hour, minute and second display mode 2 : Fixed color large font display mode A1 : Breathing mode, hour, minute and second display method A2 : Dynamic color large font display method 0 : Detect the strength of the input signal, the higher the value, the greater the strength of the detected input signal Set left and right channel input . (When using the voice control function, the "channel input " must be set to "left " ) When there is no audio input, the time to display the clock is about 3 seconds 1 : Frequency is displayed from low to high 2 : The middle frequency is low and the two sides are high display set alarm 1 set alarm 2	10 Setting range: 3 seconds to 18 seconds 0 1 2 prohibit 7 prohibit prohibit
<b>3 One-key restore to factory settings</b>						

In the running state, long press the "button 2" for more than 3 seconds , the screen will display RST , and there will be a long beep , indicating that the factory settings have been successfully restored.