

# XB-C100 Code Editor



## 1.Product features:

(1) XB-C100code editor: Large display panel, convenient touch screen operation and rich display.

(2) XB-C100 supports operating system upgrade.

(3) XB-C100 adopts built-in battery, support continuous work for 10 hours.

(4) XB-C100 supports mainstream model DMX512 chip, can write code and write parameters to DMX512IC.

(5) XB-C100 can perform DMX512IC lamp channel address test and test results.

(6) XB-C100 port outputs enhanced TTL and 485 differential (DMX) signals, which can load TTL/DMX512 lamps.

(7) XB-C100 can support maximum 512/2048 pixels (DMX lamps with a maximum of 512 pixels, for example with three channels).

(8) XB-C100 22 built-in test effects (optional three-channel / four-channel built-in effects).

**(9)** XB-C100 can insert SD card to play effects (software effect output selection K-1000), using the same as the K-1000C controller.

## 2.Code editor interface definition:



Code	Code editor interface and indicator definition					
No.	Name	Port silkscreen	Definition			
1	Charging port	VCC/GND/VCC	DC12-24V power supply socket			
2	Power Indicator	POWER	Power indicator (normally on when power on)			
3	Status Indicator	Status	Status Indicator			
4	SD card slot	SD	SD card slot (play program)			
5	Signal output port	GND/A/B/ADDR	Single wire DMX512 connection port			
6	USB charging port	DC5V	USB DC 5V power supply port			
7	Switch	SWITCH	Code editor switch			
8	Touch screen		Code writer operation panel (touch screen)			

# **3.Function definition**



## 4.Output port wiring mode:

①. Conventional lighting wiring diagram diagram



③. DMX512 single wire signal line wiring diagram







④. DMX512 differential signal line wiring diagram (AB line address)



# 5.Test function

After the code writer is turned on, select "Test" in the start interface to enter the test interface;



The test is divided into four major functions

①Smart address writing ②Test address ③Set parameter ④

## **Test effects**



## 5.1 Smart address writing

5.1.1 Click "Smart Address" to enter the chip classification interface 1, as shown below;

UCS系列	SM系列
TM系列	Hi系列
GS系列	其它

5.1.2 Click to select chip series to enter the next page;

Chip series	Chip model		Remarks
	UCS512-A	UCS512-B	
	UCS512-C4	UCS512-CN	Refer to
UCS series	UCS512-D	UCS512-E *Note 1	picture a
	UCS512-F	UCS512-G6	
	SM1651X-3CH	SM1651X-4CH	
	SM17512	SM1752X	Refer to
SM series	SM17500	SM17500	picture b
		Self-channel setting	picture b
	SM1852X		
	TM512AB	TM512AL	Refer to
TM series	TM512AC	TM512AD	picture c
	TM512AE		picture c
HI series	Hi512A0	Hi512A4	Refer to
<b>UI 261162</b>	Hi512A6	Hi512D	picture d
GS series	GS8511	GS8512	Refer to
GS Series	GS8513	GS8515	picture e
Others	QED512P		Refer to
			picture f



Picture d

#### picture c



picture e

picture f

NOTE 1: UCS512E address write, Need to confirm that the fixture's own channel has been written.

5.1.3 Click to select the chip to be coded and enter the code-writing interface (for example, UCS512C4)

	去写参数
芯片型号:	UCS512-C4
起始通道:	- 1 +
间隔通道:	- 3 +
(写址)	(测试地址)

Start channel: start address of the first fixture, +/- button or click number to change (usually 1)

**Interval channel:** the channel address interval of the lamp IC, +/- button or click the number to change (this value needs to be confirmed by the actual lamp)

Write address: Click this button, and the code writer will send a code write instruction;

**Test address:** After writing the address, click to test the address (the page will turn to the "test address" page);

**Go to write parameters:** After clicking, the code writer will write the parameters (the page turns to the "parameter setting" page).

5.1.4 After filling in the reated address data, click the "Address" button;

5.1.5 Click "Address", the code writer will pop up a pop-up window, confirm the prompt or wait a few seconds, the pop-up window will close. (The content of the prompt pop-up window is mostly the response of the lamp lighting during the setting operation; it can be used as a test for the success of the operation), click "write address" again to start writing the address;

	24dme	安立正常中心
	写址成功后首芯片亮白灯, 同时其它芯片亮红灯, 表示写址完成	
	确定	取消
「写址	)	测试地址

5.1.6 When addressing is in progress, the page displays: "Addressing now"; after finishing addressing, the page displays: "Addressing".

5			去写参数					去写参数
	芯片型号:	UCS512-C4		and and	芯片型号:	UC	S512-C4	
	起始通道:	- 1	+		起始通道:	-	1	+
	间隔通道:	- 3	+		间隔通道:	-	3	+
	正在写址	测试地址			写址		(测试地址	D

5.1.7 After complete the address edition, can click "test the address" to test.

## 5.2 Test the address

间隔通道:	- 3 +
	□ 补偿模式
手动测试:	- 0 +
自动测试:	开始测试

Interval channel: channel interval between light points (maximum 255);

Compensation mode: Check to block some of the lamp IC functions during the test

(automatically light up when there is no signal) to ensure no interference in the test.

Manual test: manually click +/\_ to test; or click the middle number\*Note 2, and enter the value test in the middle (maximum 1536).

Automatic test: Automatic pixel test.

Note 2: Click the number on part of the page of the code writer, and a small keyboard will appear for easy input of numbers. As shown below:

间隔通道:				3
		1	2	3
	手动测试:	4	5	6
		7	8	9
自动测试:		\$	0	确定

5.3 Setting parameters (setting parameters needs professional person to operate)

## Setting parameters: the parameters can be set again some DMX512 chips's

### function and status.

UCS系列	SM系列
TM系列	Hi系列
GS系列	其它

5.3.1 Click" setting parameters", enter the chip classification interface 1, as show below:

5.3.2 Click select chip series, enter the below page:

CHIP series	Chip model	Chip model	
	UCS512-A	UCS512-B	
	UCS512-C4	UCS512-CN	Refer to
UCS series	UCS512-D	UCS512-E	diagram a
	UCS512-F	UCS512-G6	
SM series	SM1651X-3CH	SM1651X-4CH	Refer to
Sivi Series	SM17512	SM1752X	diagram b

	SM17500	SM17500	
		Self-channel setting	
	SM1852X		
	TM512AB	TM512AL	Refer to
TM series	TM512AC	TM512AD	diagram c
	TM512AE		ulayi ahi c
HI series	Hi512A0	Hi512A4	Refer to
ni senes	Hi512A6	Hi512D	diagram d
GS series	GS8511	GS8512	Refer to
Go series	GS8513	GS8515	diagram e
Others	QED512P		Refer to
			diagram f

#### NOTE: The chip model from the above form in red color has no parameters setting.



5.3.3 Click to select the chip to be set and enter the setting interface (such as UCS512C4)



UCS512C4 parameter interface;

Parameters content: ①Field selection; ② No signal status; ③Power-on brightness status;

SET: SET button

**Go to address:** After clicking, the code writer will write the address (the page will turn to the corresponding chip address page of "Smart Address")

Arrow: Scroll left and right (some chip parameter items are divided into multiple pages);

5.3.4 Select the chip parameter items to be set, and change the parameter settings.

5.3.5 Click "SET", the code writer will pop up a pop-up window, confirm the prompt or wait a few seconds, the pop-up window will close. (The content of the prompt pop-up window is mostly the response of the lamp lighting during the setting operation; it can be used as a test for the success of the operation), click "SET" again to start writing the address;

写参数成功后, 所有芯片亮红灯, 表示写参数完成	
确定	取消

5.3.6 When the setting is in progress, the page displays: "Setting" is being set; after finishing the setting, the page displays: "Set".

5.3.7 After completing the settings, if you have changed the address channel settings for some settings, you need to rewrite the address of the lamp; click "Go to address".

## 5.4 Test effects

Test effect: After completing the smart address writing or setting the parameters, you can click

- <text>
- the test effect to test; verify whether the operation meets the requirements. 5.4.1 Click "Test Effect" on the test page to enter the page, as shown below

- ① Number of channels: number of pixel points of lamps and lanterns (1-6 channels)
- 2 Effect: channel test effect (see effect list)
- ③ Brightness: Brightness setting during effect test
- ④ Stepless dimming: Dimming separately for channels
- 5.4.2 Select and fill in the relevant parameters, click on the effect, brightness, and stepless dimming to test.

## 5.4.3 Effects list

Effect	Name	Content	Remarks
No.			
<mark>1</mark>	Channel one	The first channel lights	1-6 effects are
		up	related to the setting
<mark>2</mark>	Channel two	The second channel	of the number of
		<mark>lights up</mark>	channels; if 4
<mark>3</mark>	Channel three	The third channel	channels are set, the
		<mark>lights up</mark>	single channel effect
<mark>4</mark>	Channel four	The fourth channel	will only have 1-4
		<mark>lights up</mark>	effects
<mark>5</mark>	Channel five	The fifth channel lights	
		<mark>up</mark>	
<mark>6</mark>	Channel six	The sixth channel	
		<mark>lights up</mark>	
7	All bright	All channels bright	
8	All off	All channels off	
9	All on and off	All channels on and	

	alternately jump	off	
10	Alternate hopping of	All channels turn on	
	all channels	and off alternately	
11	Single point scan	Pixels scan	

### 5.4.4 Stepless dimming

Stepless dimming: Customize the brightness setting (maximum 255), the lamp will display the set color.



6.Play function (use same as the K-1000C)

The code writer has specially added a playback function to facilitate lamp testing.

6.1 After the code writer is turned on, select "Play" on the start interface to enter

the playback interface;



## 6.2 Play page



#### 6.2.1 Code editor play status

①Preset effects: built-in effects playback (chip optional, 22 programs)

2 SD effect: SD card effect playback (chip lock)

Note: In SD effect playback, you can click "Effect Switch" ---- to switch between preset effects and SD effects.

#### 6.2.2 Preset effect mode (Built-in effect playback)

Chip: optional (see chip list)

Mode: optional (22 built-in effects)

Speed: optional (1-16 speed, with a list of speed and playback frame)

Loop: Optional (click the button to switch to loop or not to loop)

Built-in effect channel selection: built-in effect playback supports three-channel/four-channel playback (button switching)

Enter test: After clicking, the code writer enters the test function

### **Chip list**

No.	Name	Remarks		
1	UCS1903	Return to 0 code protocol output		
2	DMX 250K	DMX512 250k rate output		
3	DMX 500K	DMX512 500k rate output		
4	GS851X	GS series IC output		

### 6.2.3 SD effects mode(The software effect is output according to K-1000C)

Chip: Locked

Mode: Optional (SD card program)

Speed: Optional (1-16 speed, with a list of speed and playback frame)

Loop: Optional (click the button to switch to loop or not to loop)

Effect switching: switch to built-in effect playback (button switching) Enter test: After clicking, the code writer enters the test function

#### 6.2.4 Speed and playback frame

Speed	Frame/ s	spee d	Frame/ s	Spee d	Frame/ s	Spee d	Frame/ s
1	4 frame	5	8 frame	9	14 frame	13	23 frame
2	5 frame	6	9 frame	10	16 frame	14	25 frame
3	6 frame	7	10 frame	11	18 frame	15	27 frame
4	7 frame	8	12 frame	12	frame	16	30 frame

#### 7.Time setting

The current time will be displayed in the "Start Page" and "Play Page" as shown below



#### 7.1 Time setting

7.1.1 In the position where the screen time is displayed, long press for 3-5 seconds, and a time pop-up window will pop up, as shown in the figure below:

2020-08-20 15:42:19 星期四				
	20?????????????????????????????????????			
播放	1	2	3	
	4	5	6	
	7	8	9	
v0.1	Ŷ	0	确定	

7.1.2 You can modify the current time (year month/day/hour/minute/second);

7.1.3 Confirm key to save changes.

#### 8.Battery settings

The code writer has a built-in rechargeable battery, and the current battery level is displayed on the screen; please charge it in time according to the situation.

Charging can use the charging port to connect to DC12-24V or the USB charging port DC5V.

Note: It is necessary when charging, and pay attention to power off immediately after full charge to prevent overcharge from damaging battery life!

# 9.Specific parameters:

Physical parameters:	Storage card:			
Working temperature: -20℃—85℃	Type: SD card			
Working power: DC 5V -24V INPUT (Built-in battery)	Capacity: 128MB—32GB			
Battery capacity: 4000mAh	Format: FAT or FAT32			
Power consumption: 4W	Storage file: *.led			
Data transmission port: 4pin terminal block				
Weight: 1.7Kg				

Dimension: L140mm \* W100mm \* H40mm





#### 10.SD card format

(1) Before copying files to the SD card, the SD card must be formatted (note that it must be formatted before each copy).

(2) Formatter

()SD card settings—"File system", "FAT" format (SD card capacity ≤ 2G) or "FAT32" format (SD card capacity  $\ge$  4G).

②SD card settings—"allocation unit size", click the drop-down button to select "default configuration size" or click the "restore device defaults" button.

③Start formatting.

Show as below:

	格式化 可移动磁盘 (H:)		格式化 可移动硬盘 (H:)
	容里 (2):		容里 (2):
	244 MB		7.39 GB 🗸
0	文件系统 (E) FAT (默认)		ズローデン税 (型) 「FAT32 (默认) ↓
	分配单元大小(4)		分配单元大小(2)
	默认配置大小    ▼		憲认配置大小
J	还原设备的默认值 (0)	J	还原设备的默认值 @)
	卷标 (L)		巻标 ①
			可移动硬盘
	格式化选项 @)		格式化选项 @)
	☑ 快速格式化 Q) □ 创建一个 MS-DOS 启动盘 (M)		☑ 快速格式化 Q) □ 创建一个 MS-DOS 启动盘 (M)
	开始 ©)     关闭 ©)		开始(S) 关闭(C)

(3) The SD card cannot be hot-swapped, that is, every time the SD card is inserted or removed, the power to the controller must be disconnected.