H803SC Instructions

Ⅰ.Introduction

H803SC is a music controller that can play diverse effects in accordance with strength and rhythm of music, capable of controlling single-line, double-line, three-line and four-line LED driver chips with two output ports, drive maximum 2560 pixels and can drive maximum 4096 pixels without *.hmc file.

Auxiliary software is “LED Build Software”.

Ⅱ.Driver chips

H803SC can drive the following chips: LPD6803, LPD8806, LPD6813, LPD1882, LPD1889, LPD6812, LPD1883, LPD1886, UCS6909, UCS6912, UCS1903, UCS1909, UCS1912, WS2801, WS2803, WS2811, WS2812, TM1812, TM1809, TM1804, TM1803, TM1829, TM1913, TM1914, TM1926, LX1003, LX2003, LX2006, DMX512, HDMX, APA102, P9813, DZ2809, INK1003, TLS3001, TLS3002, SM16711, SM16716, SM16726, LD1510, LD1512, LD1530, LD1532, MBI6021, MBI6023, MBI6024 etc.

One port usable only when driving three-line chips or four-line chips and can only drive 980 pixels, for example: DM114, DM115, DM13C,

DM134, DM135, DM136, MBI5001, MBI5168, MBI5016, MBI5026, MBI5027, TB62726, TB62706, ST2221A, ST2221C, 74HC595, 6B595, XLT5026, ZQL9712, ZQL9712HV, HEF4094, A8012, etc.

Notice: LD151x only support 16-bit and 8-bit modes, SM16726 only support SET=1.

Ⅲ.Performance

1. Drive maximum 2560 pixels with two output ports. Drive maximum 4096 pixels without *hmc file in SD card.
2. Eight playback modes. Play diverse effects in accordance with strength and rhythm of music. Can also play DAT file.
3. Audio input supports microphone and earphone socket.
4. SD card support FAT32 and FAT16 format, the maximum capacity is 64G bytes, stores up to 64 DAT files.
5. IC type, clock frequency must be set in “LED Build Software”

Ⅳ.Instructions

1. SD card must be formatted into FAT16 or FAT32 after the first time usage or many times deletion. Stores up to 64 DAT files, which are played in alphabetical order.
2. After power-on, digital tube displays “3C”, if SD card is not inserted the right digital tube flash “C”; the left digital tube flash indicates SD card or socket is broken, the flash number indicates the corresponding malfunction. Displaying “F0” indicates without

DAT file. Displaying “FE” indicates controller type is wrong. Displaying “Fb” indicates there are too many pixels or too many ports.

3. Two buttons are “MODE” and “SPEED”. Press “SPEED”, if current status is “MODE”, it will switch to “SPEED”; if current status is “SPEED”, it will adjust playing speed. Press “MODE”, if current status is “SPEED”, it will switch to “MODE”; if current status is “MODE”, short press to switch mode, long press to switch status.
4. 0—7 represents eight kinds of modes, 0: DAT sequence; 1: DAT speed; 3—7: auto music, mode 0 does not need music.
5. In “LED Build Software” sculpt settings, controller type must select “SC”.

When making DAT file, select two lines of a controller, pixels number of each line must be less than 1280; select one line of a controller, pixels number must be less than 2560.

When making *hmc file, width and height must be less than 128 pixels. Width by height must be less than 2560 pixels, pixels can not be overlapped and total pixels number must be less than 2560.

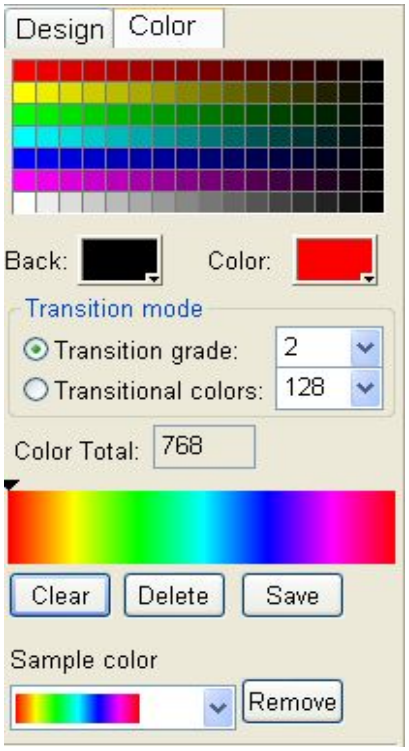
When *hmc files and DAT files are both in SD card, sculpt and IC type must be the same.

If there is no *hmc file in SD card, select two lines of a

controller, each line can connect 2048 pixels; select a line of a controller, this line can connect 4096 pixels. The actual load ability is related to lamps.

6. *hmc file includes light sculpt, LED IC type, light type, scanning clock, color inversion and color palette. The following is the making method.

   In “LED Build Software” color panel, need to select current color and set color palette, color number in palette is maximum 128, less than that, color will be circularly used.



   After setting up sculpt and light setting, click “file”—“output H803SC configuration file” in light sculpt window.

7. Music mode only needs *hmc file, the other three modes only need DAT file.

Ⅳ. Buttons and display

1. Press speed button to set playing speed displayed on digital tube.
2. Press mode button to set playing mode displayed on left digital tube.

Number	3--7	2	1	0
Mode	Auto Music	DAT Music	DAT Speed	DAT Sequence

3. Long press mode button to set synchronization status displayed on right digital tube. When using differential synchronization, set only one controller to “H” mode.

Display	A	b	d	H
Status	AC power	Playing speed too fast	DC power	Differential Sync

Ⅴ.Definition of Port

PORT1			PORT2		
GND	CLK	DAT	GND	CLK	DAT
GND	D-	D+	GND	D-	D+
GND	CLK	DAT		LAT	EN

Ⅵ.Specifications

Input Voltage	AC220V
Power Consumption	1W
Pixel Number	4096 pixels
Weight	1Kg
Working Temperature	-20C°--85C°
Dimension	L145 x W140 x H54

Installation hole distance	94.6mm
Carton Size	L205 x W168 x H69