H803SC Instructions

1. Abstract

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 ports, control maximum 2560 pixels and can control maximum 4096 pixels without *.hmc file.

Auxiliary software is “LED Build Software”.

2. Supported Driver Chips

LPD6803, LPD8806, LPD6813, LPD1882, LPD1889, LPD6812, LPD1886, LPD1883, UCS6909, UCS6912, UCS1903, UCS1909, UCS1912, WS2801, WS2803, WS2811, WS2812, TM1812, TM1809, TM1804, TM1803, TM1829, TM1926, TM1914, LX1003, LX2003, LX2006, DMX512, APA102, P9813, DZ2809, INK1003, BS0825, BS0901, TLS3001, TLS3002, SD600, SM16711, SM16716, SM16726,

LD1510, LD1512, LD1530, LD1532, MBI6023, MBI6024, etc.

Note: One port usable when H803SC controls three-line chips and four-line chips, 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.

3. Performance

(1). Drive maximum 2560 pixels with two ports. Without *hmc file(music profile) in SD card, H803SC controls maximum 4096 pixels.

(2). Eight playing modes. Play diverse effects in accordance with strength and rhythm of music.

(3). Support microphone and earphone socket audio input.

(4). SD card supports FAT32 and FAT16 format, maximum capacity is 64G bytes, stores up to 64 DAT files.

(5). IC type, clock frequency must be set in “LED Build Software”

4. Manual

(1). SD card must be formatted into FAT16 or FAT32 format after many times of file deletion. All files stored are played in alphabetical order.

(2). After power-on, digital tube displays current mode. There are two buttons besides digital tube, the button above is used to choose playing mode, the button below is used to set speed. Without SD card, the right digital tube flickers “C”. Displaying “F0” means no valid DAT file in SD

card. Displaying “FE” means controller type is wrong. Displaying “Fb” means too many pixels or too many ports in LED Build Software.

(3). Number “0” to “7” on digital tube represent eight kinds of playing modes. Mode 0 does not need music.

(4). In “LED Build Software”, controller type must be “SC”.

(5). You can choose “two line with a slave” (pixel number of each port must be less than 1280) or “one line with a slave” (pixel number of this port must be less than 2560) in LED Build Software.

(6). Before exporting music profile(if you need it) in LED Build, both height and length must be less than 128 in your mapping, height multiple length must be less than 2560, pixel overlap is not allowed.

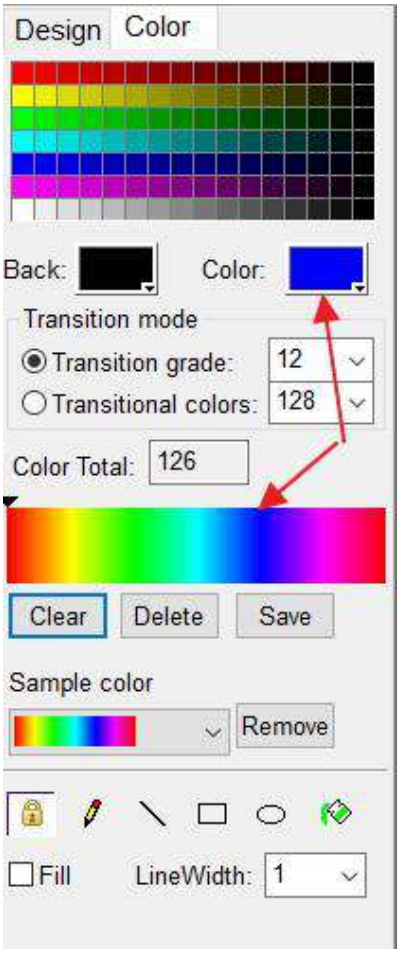
(7). When *hmc (music profile) files and DAT files are both in SD card, sculpt and IC type must be the same for them.

(8). If there is no *hmc file in SD card, choose “two line with a slave”, each line can control max 2048 pixels, choose “one line with a slave”, this line can control max 4096 pixels. The actual load ability is related to lamp.

(9). *hmc file includes pixel mapping, LED IC type, light type (RGB order), scanning clock, color inversion and color palette. The following is the making method.

In “LED Build Software” color panel, you need to choose the current color(we call it hat color, which is also the top color) and set color palette,

maximum color number in palette is 128, less than that, color will be circularly used.



After setting up, in sculpt window, click “file”—“output music profile” in light sculpt window.

Note: Music mode (Mode 3 to 7) only needs *hmc file, DAT mode (Mode 0 to 2) only needs DAT file.

5. Buttons

(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

6. Ports Definition

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

7. 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