



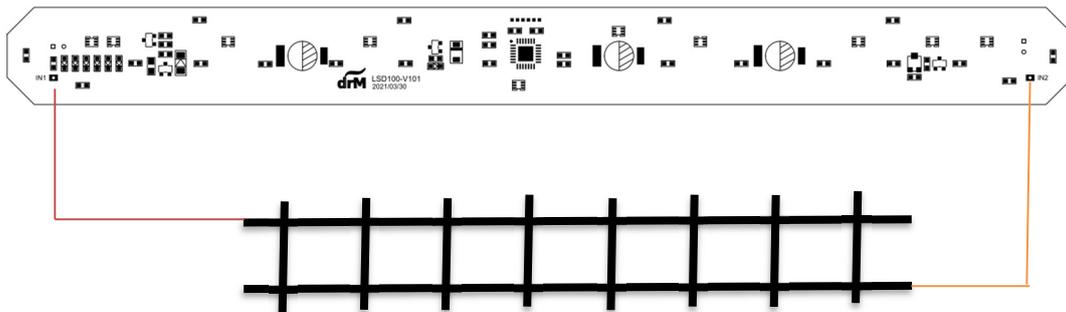
LSD100 Coach lightbar  
Ver. 100

## 1. Features

1. Built-in 20 LEDs, divided into 1 group of carriage lights (14 LED), 1 group of aisle lights (6 LED).
2. The lighting time of the carriage lights can be adjusted individually.
3. Support car number 1~9999 car number.
4. Support DC and digital system to control car lights (1).
5. Built-in anti-flicker large capacitor.
6. LS Model train dedicated.

Note (1). Use the DC system control will directly light up the LED, can't be controlled separately.

## 2. Wiring



- IN1, IN2 Connect rail power.

### 3. Fx

Fx	Description
F1	All cabin lights are on.
F2	Aisle lights on.
F3	Cabin lights on by CV.

1. The turn-on time of F1 car lights is determined by CV49~CV62.
2. The F3 function is determined by CV47 and CV48 which light is turned on or off.

### 4. CV

CV	Description	Range	Reset
1	Short address 1~127	1~127	3
7	Version		6
8	Reset decoder	8	164(drM number)
17	Ext address Hi-byte	-	192
18	Ext address Low-byte	-	127
29	Bit 5 select car number 1~127 or 128~9999	Bit5:0 car number 1~127, Bit5:1 car number 128~9999	2
47	The first 8 LED cabin lights are on or off	First room LED: 1 Second room LED: 2 Third room LED: 4 Fourth room LED: 8 Fifth room LED: 16 Sixth room LED: 32 Seventh room LED: 64 Eighth room LED: 128 Add the number of the room that needs to be lit and write.	197

48	The second 6 LED cabin lights are on or off	First room LED: 1 Second room LED: 2 Third room LED: 4 Fourth room LED: 8 Fifth room LED: 16 Sixth room LED: 32 Add the number of the room that needs to be lit and write.	58
49	The first room light delay time, the larger the number, the longer the delay.	1~250	100
50	The second room light delay time, the larger the number, the longer the delay.	1~250	50
51	The third room light delay time, the larger the number, the longer the delay.	1~250	30
52	The fourth room light delay time, the larger the number, the longer the delay.	1~250	80
53	The fifth room light delay time, the larger the number, the longer the delay.	1~250	200
64	The sixth room light delay time, the larger the number, the longer the delay.	1~250	180
55	The seventh room light delay time, the larger the	1~250	100

	number, the longer the delay.		
56	The eighth room light delay time, the larger the number, the longer the delay.	1~250	110
57	The ninth room light delay time, the larger the number, the longer the delay.	1~250	220
58	The tenth room light delay time, the larger the number, the longer the delay.	1~250	240
59	The eleventh room light delay time, the larger the number, the longer the delay.	1~250	10
60	The twelfth room light delay time, the larger the number, the longer the delay.	1~250	70
61	The thirteenth room light delay time, the larger the number, the longer the delay.	1~250	140
62	The fourteenth room light delay time, the larger the number, the longer the delay	1~250	200
105	User define CV1	0~255	0
106	User define CV2	0~255	0

Table 1

## 5. CV Wirte

- i. To write CV value, please select Direct mode/Page mode on the controller to write CV value.
- ii. When writing different CV values, please keep an interval of 2 seconds.
- iii. For the range of CV value, please refer to Table 1.
- iv. Not supported by POM.

## 6. Reset decoder

1. Reply to the original factory settings, please write the value 8 in CV address 8 after completion, the chip will return to the original factory settings, please refer to Table 1.

## 7. Precautions

1. Do not short-circuit any wires when wiring, so as not to burn the decoder.
2. The DC power supply should not exceed DC20V.
3. The digital system supports HO regulation, please do not connect 1 regulation and G regulation.
4. Do not change the parts on the PCB at will.
5. Marklin digital system is not supported.
6. This product is not a toy, please do not give it to children under 14 years old.