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SD Card Controller—SY-30-R series

USER MANUAL

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Brief Introduction of SD Card Controller

Overview

1. SY-301 controller is applicable to LED Digital Lamp/screen in small and medium size and point light source used in outline of building.
Solution: TM1803/TM1809/TM1804/TM1812, etc
UCS1903/UCS1909/UCS1912/UCS2903/2909/2912, etc;
WS2811, BS0825/BS0901/BS0902 etc;
Seekway 2-wire singlechip (J69/J08/F16/J12/J68/F01, etc)
Seekway 3-wire singlechip (D63/D06/D08/D16/D12/D01, etc)
DMX512 high-power module (P12/P14/P15/P16/P17, etc)
2. Equipped with Seekway LED Player software. Users can freely create effects and put it in the SD card.
※ User can reset the software and program effect according to the practical project.
3. Several RS-485 signal output channel (Data independence)
4. Auto or manual selection, speed adjustment is available. Sound volume and alternating current synchronous are optional.
5. Audio active, music active, encryption and DMX decoders are the additional function for optional.

| Sub-controller | 256 Gray-scale | 32 Gray-scale | 256 Gray-scale | 8 Gray-scale | 16 Gray-scale | 32 Gray-scale | 16 Gray-scale | 64 Gray-scale | 16 Gray-scale | 64 Gray-scale | 4096 Gray-scale | 256 Gray-scale |
|----------------|--------------------|----------------|----------------|--------------|---------------|---------------|----------------------------------|---------------|------------------------------|---------------|-------------------|----------------|
| | Single wire(pixel) | 3-wire (pixel) | | 4-wire (m) | | | 2-wire of Seekway 6/8/12/16pixel | | New 2-wire of Seekway 6pixel | | 3-wire of Seekway | DMX512 |
| C11 | — | 216 | 144 | 48 | 40 | — | — | | — | | — | — |
| C12 | — | 720 * 2 | 720 * 2 | — | 48 * 2 | 40 * 2 | — | | — | | — | — |
| C13 | 1280 | — | — | — | — | — | — | | — | | — | — |
| C16 | — | 720 * 4 | 640 * 4 | — | 60 * 4 | 45 * 4 | — | | — | | — | — |
| A68 | — | — | — | — | — | — | 120 | 90 | 240 | 180 | 960 pixel | 170 pixel |

Installation Environment

Use in door, keep away from moist.

Parameter of hardware

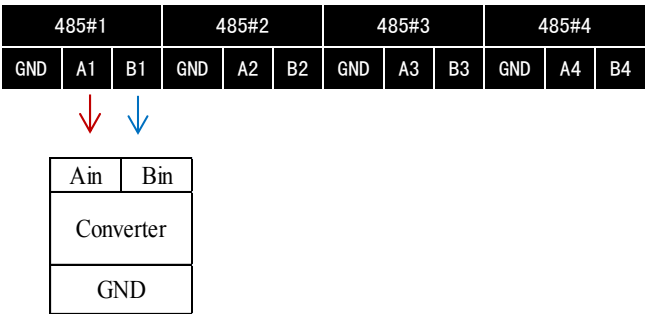
- 1. Size: 192L×122W×45H（mm）
- 2. Power: less than 3W
- 3. Input voltage: AC220V
- 4. Working Environment: -20℃ ~ 70℃
- 5. Signal Output port: 4 route/8 route
- 6. Signal output: RS-485signal
- 7. Accessory: [SD card] 1 pcs,
[Terminal blocks] 1pcs/route.

Connection of SY-30R series

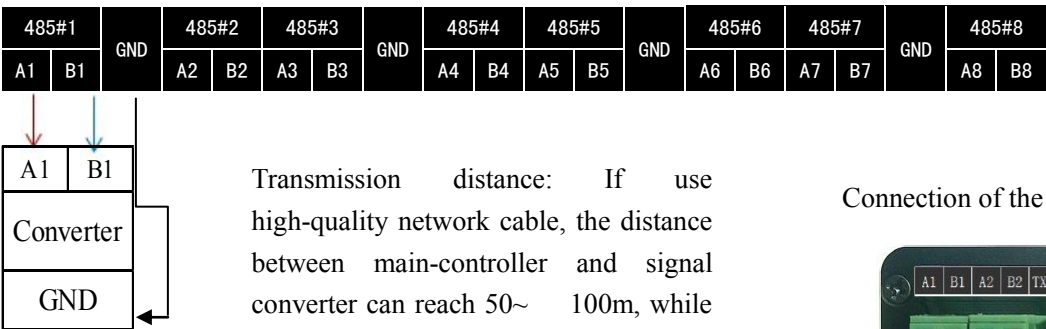
Transmission distance: If use the high-quality network cable, distance between main-controller digital tube can be 20m to 50m.

The circuits are different in different applications. We have made the appropriate settings according to the practical requirements, so please do not change them arbitrarily.

A. SY-304-R

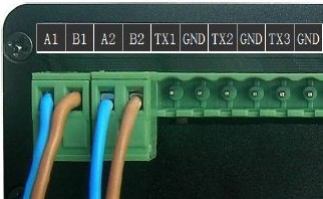


B. SY-308-R



Transmission distance: If use high-quality network cable, the distance between main-controller and signal converter can reach 50~ 100m, while the distance between converter and lighting can reach 2~5m.

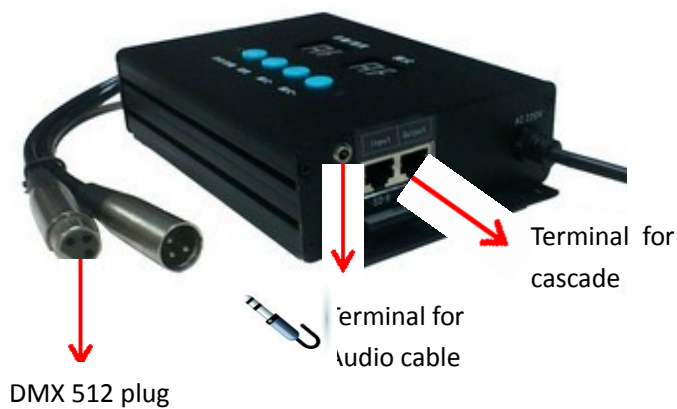
Connection of the signal terminal



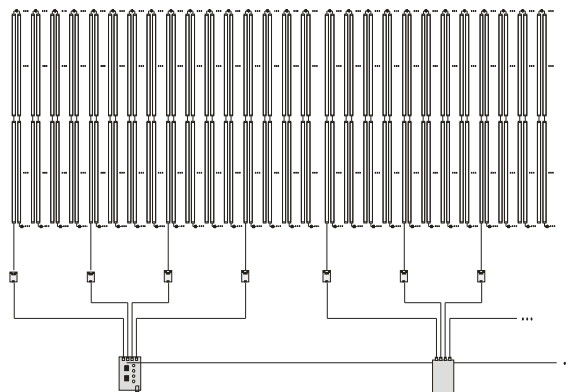
Encryption and Decryption

When the trial expires, the encryption of main-controller will stop to work. "PP PP" appears on the display window jumpily. Then uses can decrypt the controller by pressing the button of panel. Details refer to the "Indication of decoding for main- controller".

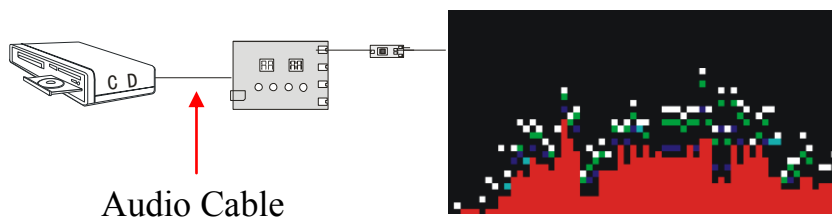
Additional Function



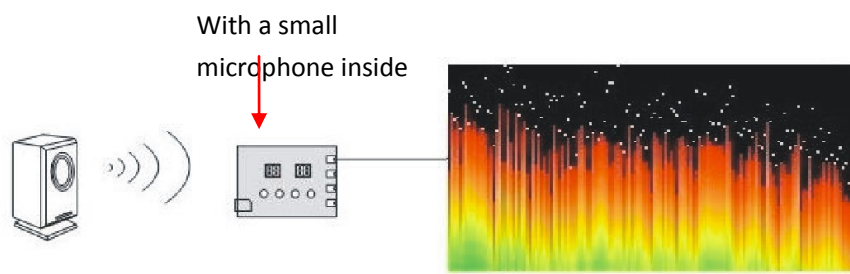
Cascade Solution



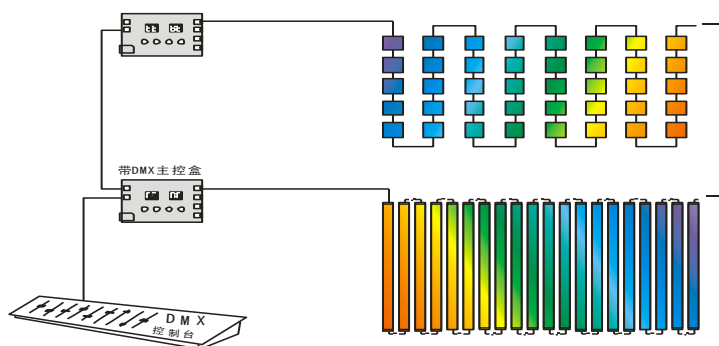
Audio Respond Option



Music Active Option



DMX control



Speed

From 1 to 12 to adjust the display speed from fast to slow by pressing button [Speed].

| | display value of Speed | | | | | | | | | | | |
|-----------------|------------------------|---|----|---|----|---|----|---|----|----|----|----|
| Common Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Synchronic Mode | 22 | | 24 | | 26 | | 28 | | 30 | | 32 | |

※ The speed is set according to the quantity of the Digital Tube. If the display value is less than the actual speed, then the speed value will not be displayed.

※ If the display value is larger than 26, the state will enter to the alternating current synchronous mode automatically.

Mode

Select the sound option or pattern mode by the button of MODE+ or MODE-.

| Sequence of mode | Auto-display Pattern Mode | Manual Display Pattern Mode |
|-----------------------|---------------------------|-----------------------------|
| Display value of mode | 0 | 1~99 |

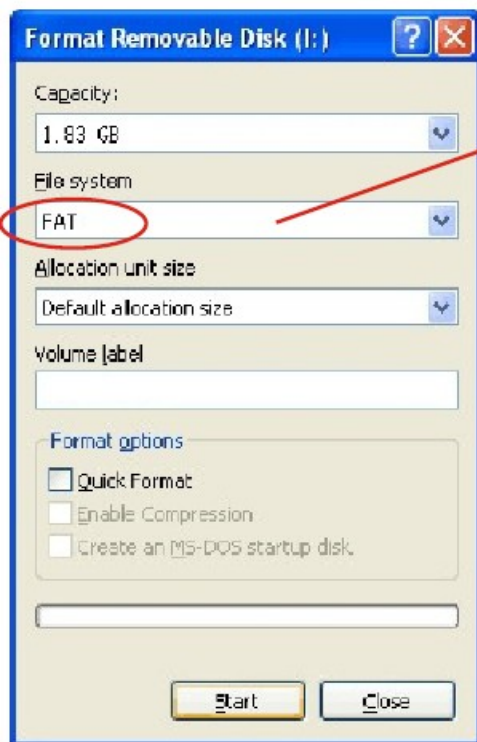
※ Press [Auto/Speed], the system will turn to Auto-display pattern mode. (The entire pattern is displayed circularly.)

SD Card Usage and Recording

Don't insert or pull out the SD card when power on, otherwise the SD card maybe damaged.

Please refer to the Operating Instruction of the SD Card Recording.

1) Format the SD card



Format the SD card

2) Copy the “SD1(****).bin” to SD card. (Only one bin file could exist in SD card)



Error Explanation of SD Controller

| Code | Error explanation | Reason |
|------|---|---|
| E01 | Lack of SD card | Contact loose in card slot or do not have SD card |
| E02 | No respond from SD Card | Malfunction or the unsupported continuously read of the SD Card |
| E03 | Unable to reset SD card | Malfunction or the unsupported continuously read of the SD Card |
| E04 | Unable to activate SD card | Malfunction or the unsupported continuously read of the SD Card |
| E05 | Unable to read from SD card | malfunction or loose contact of the SD card. |
| E06 | Unable to search any code | Combine unfinished/card unformatted / without files |
| E07 | The S/N of the SD card and SD card controller are not match | Error file of SD Card |
| E09 | The S/N of the controller and software are not match | S/N of player and the controller are not match. |

