Smart Pixel lights control system

Smart controller Instruction

For:

◆ **Smart controller**
SW-201 / SW-301 / SW-301U

◆ **Multi-function controller**
SY-208 / SY-302G / SY-324
SY-328 / SY-408 / SY-418 / BL-321

◆ **LoRa system controller**
LM-100 / LR-101

◆ **Please read this instruction manual carefully before use**

Tips:

⚠ Warm notice:

1, in order to prevent fire or electric shock accident, please place the controller in Do not expose to moisture in well-ventilated areas.

2. Turn off the controller before inserting or removing a signal cable or SD card Source, so as not to burn the controller internal chip or SD card.

3, Please avoid the SD card inserted in the controller for long-distance transportation It is easy to damage the SD card and SD card holder.
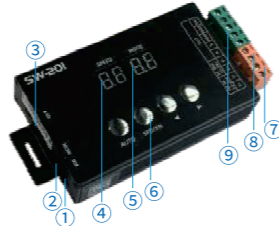
Drive Pixel Quantity

Signal	SPI (TTL)	Smandard DMX512	Extend DMX512
Pixel	1024	168	336

Controllers introduction

◆ Smart controllers

SW-201

Read more

① USB charging port
② Working light
③ SD card port
④ Speed display
⑤ Mode display
⑥ Control key
⑦ DC12-24V power input port
⑧ DC12-24V power output interface
⑨ Output interface

SW-301 / SW-301U

Read more

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① TTL signal control ports
② RS485 signal light ports
③ Speed display
④ Mode display
⑤ Control key
⑥ SD card interface
⑦ Power switch
⑧ Power interface

◆ Multi-function controllers

SY-208

Read more
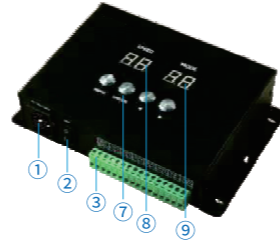
① Power interface
② Power switch
③ Output port
④ SD Card interface
⑤ DMX control output instructions
⑥ DMX control input
⑦ Control key
⑧ Speed display
⑨ Mode display

SY-302G
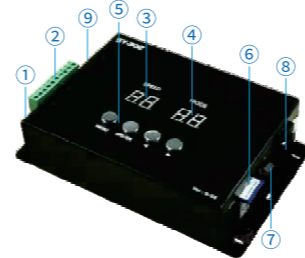
Read more

① GPS antenna interface
② Output port
③ Speed display
④ Mode display
⑤ Control key
⑥ SD card port
⑦ Power switch
⑧ Power interface
⑨ 4G antenna interface(reserved)

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SY-324

Read more
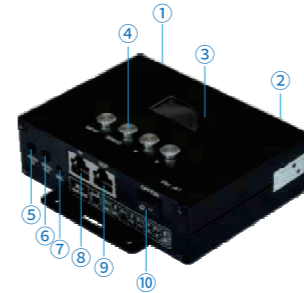
① Power interface
② Output port
③ LCD display
④ Control key
⑤ Audio input interface
⑥ Audio output interface
⑦ Microphone input interface
⑧ DMX input interface
⑨ DMX output interface
⑩ Power switch

SY-328

Read more
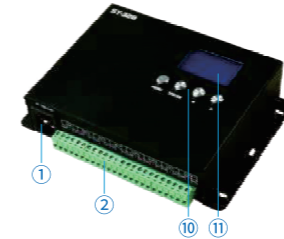
① Power interface
② Output port
③ Power switch
④ SD card port
⑤ DMX control output
⑥ DMX control input
⑦ Audio output interface
⑧ Panel port (Reserved)
⑨ Audio input interface
⑩ Control key
⑪ LCD display
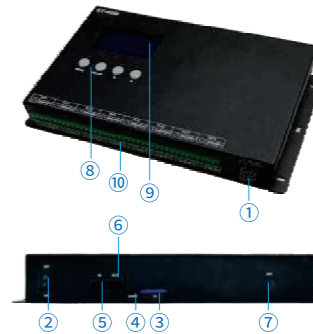
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SY-408

Read more

① Power interface
② Power switch
③ SD card port
④ Working light
⑤ Cascade input
⑥ Cascade output
⑦ GPS antenna interface
⑧ LCD display
⑨ Control key
⑩ Output port

SY-418

Read more
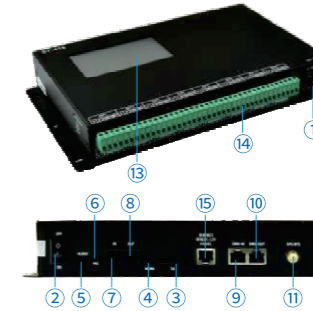
① Power interface
② Power switch
③ SD Card interface
④ Working light
⑤ Audio input interface
⑥ Microphone
⑦ Cascade input
⑧ Cascade output
⑨ DMX control input
⑩ DMX control output
⑪ GPS antenna interface (BTS is not supported)
⑫ Infrared remote control /4G /WiFi antenna interface
⑬ Touch display
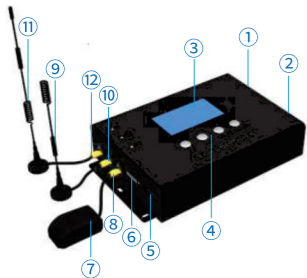⑭ Output port
⑮ KTV panel interface

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BL-321

Read more
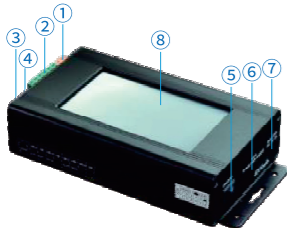
① Charging interface
② Output subport port
③ Output Network port
④ TF Card slot(for Screen firmware upgrade)
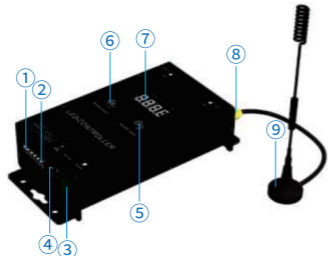⑤ Power switch
⑥ SD card slot
⑦ MicroUSB(DC5V2A)
⑧ Touch display

◆ **LoRa controllers**

LoRa master LM-100

Read more

① Power output
② Power switch
③ LCD display
④ Control key
⑤ SD Card slot (upgrade only)
⑥ 4G card slot
⑦ GPS module
⑧ GPS module interface
⑨ LoRa antenna
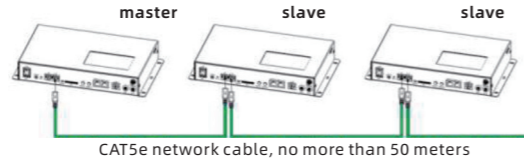⑩ LoRa antenna interface
⑪ 4G antenna
⑫ 4G antenna interface

LoRa Slaver LM-100

Read more

① Power input
② Output independent port
③ SD Card slot (upgrade only)
④ Power switch
⑤ Mode plus key
⑥ Mode minus keying
⑦ Nixie display
⑧ LoRa antenna interface
⑨ LoRa antenna

Extended function

◆ 1.Controller cascade connection

master   slave   slave

CAT5e network cable, no more than 50 meters

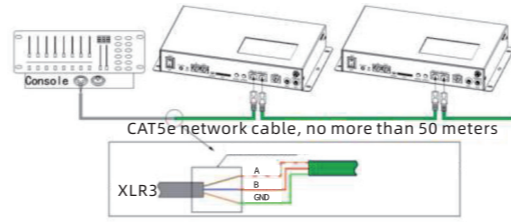**Connections to output ports**

T568B   RJ45
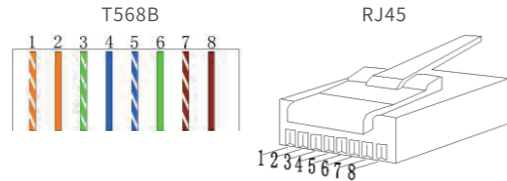
◆ 2.GPS function

- GPS support for standard SMA interface
- Marine antennaInstall the antenna in an open position
- The top is facing the sky
- Antenna spacing ≥2 meters, can be prevented
- Mutual interference

SMA ①


◆ 3.DMX console function interface

CAT5e network cable, no more than 50 meters

XLR3

Console signal output interface description:
P1=GND (yellow and green lines);
P2=D+/A (brown line)
P3=D-/B (blue line),
the male port is the receiving end,
the female port is the output end:
Console signal output interface is for reference only,
the actual signal needs to be based on the final cannon head and DMX512 console shall prevail.

◆ 3.Remote controller
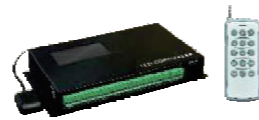
Remote control distance:
15 meters (without barrier)
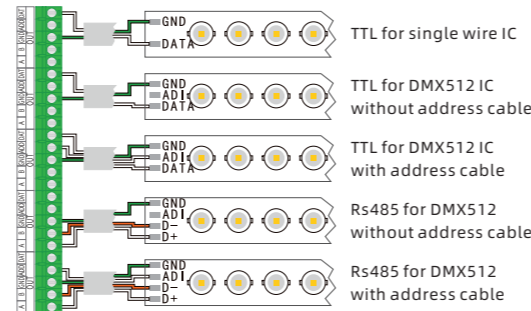Remote control function:
Mode selection/Speed adjustment/Scene
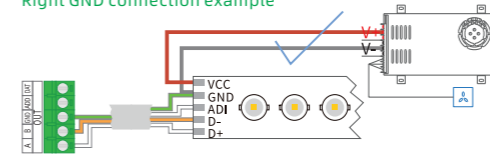
◆ 3.Touch control panel

Dynamic sound control
Lighting control
Network cable power supply
86 work bottom box installation
Inductive touch
Tempered glass panel
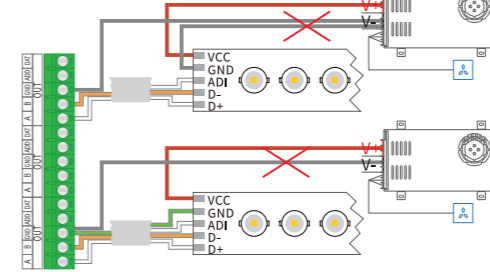
Connection Instruction

◆ Terminal

TTL for single wire IC

TTL for DMX512 IC without address cable

TTL for DMX512 IC with address cable

Rs485 for DMX512 without address cable

Rs485 for DMX512 with address cable

Right GND connection example

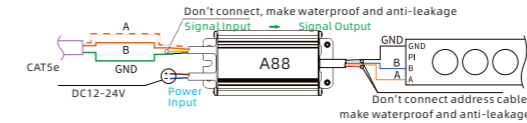

Wrong GND connection example

The controller signal output GND must be directly connected to the lamp input GND, Can not be connected to the lamp through the negative switching power supply.
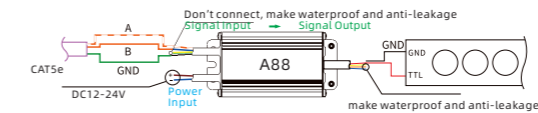
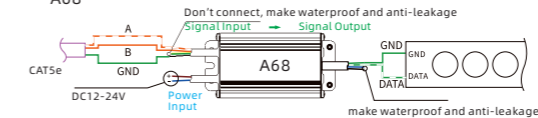## Signal Amplifier Instruction

◆ A88、A68
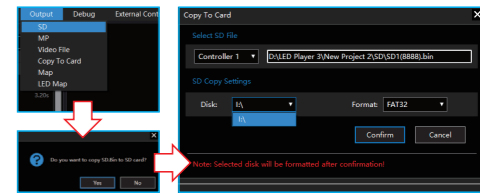
A88 for DMX512

A88 for single wire IC

A68

Copy File to SD card

◆ Way 1: Complete on software directly

Choose menu Output-SD, Click OK, then choose right SD card, Press Confirm to write *.bin file to SD card.
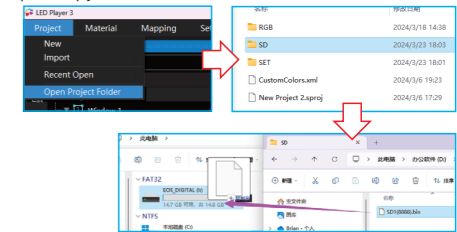

◆ Way 2: Copy *.bin file to SD card manually

Step1: Format your SD card

Options: FAT32 + 32KB
Notice:
SD card should be format every time when copy file to it.

Step 2: Copy *.bin file to SD card.

Error code instruction

E01	No SD card detected
E02	The SD card does not respond
E03	SD card has no effect file
E07	The SD card file does not match the control box
E14	effect of the LR controller exceeds upper limit memory
E15	The LR controller has no bin effect file
E18	Project points exceeded the upper limit
E20	LR series controller: The firmware file is abnormal
E21	SW/SY series: The firmware upgrade is abnormal
	IR series controller :LR initial loss purchase
E22	SW/SY series controller: The firmware file is abnormal
	LR Series controller: Memory chip initialization failed
E23	Firmware program exception
E24	Firmware upgrade failed
E25	No firmware file
E26	Generated unique code cannot be written to the SD card
E27	The SD card has too many bad areas