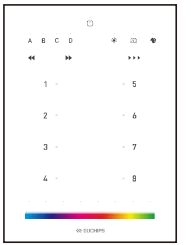
DMX Live And Stand Alone Controller
DMX-P09

Product Features



- Comply with DMX512/1990 international standard agreement
- 1024 DMX output channels, which can control 340 RGB lamps
- Can adjust full color, color temperature, monochrome and other lamps
- Real-time clock and calendar trigger function
- Programmable and on-line control via USB
- Built-in 8G high-speed memory card for independent control
- 4 external dry contacts and a set of 485 external triggers (RJ45)
- 8 touch scene buttons, 4 scene pages, support 32 offline scenes
- Touch the color/brightness/speed push rod
- The LAN can connect 50 devices and is controlled by UDP/TCP/Http
- It can receive synchronization scene, brightness and speed of DMX-03 and DMX-P08 (main mode) after networking Color control

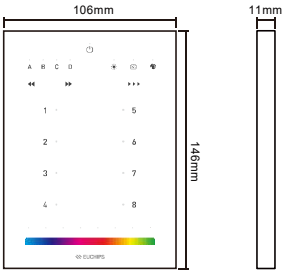
Summary

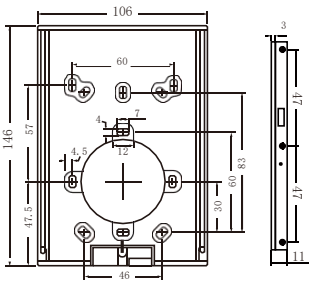
DMX-P09 is a simple and intuitive DMX touch control panel that supports USB, network, RS485, dry nodes, and clock timing controls. Using glass panels, simple and stylish. Eight numeric buttons and four scene pages allow you to select up to 32 light scenes (four pages x8), and color horizontal pushrods are used to adjust light, speed, and color. The DMX-P09 interface is simple and powerful, and it can control all DMX devices at the same time: RGB, RGBW, beam lights, mixed color lamps. Dmx-p09 can off-line control 2x512 DMX channels, it contains scene editing program, according to different needs can be downloaded through the computer to edit a variety of lighting effects, the control system to achieve R,G,B 256 levels of gray, a total of 16.77 million colors, truly display full color.

Technical Parameters

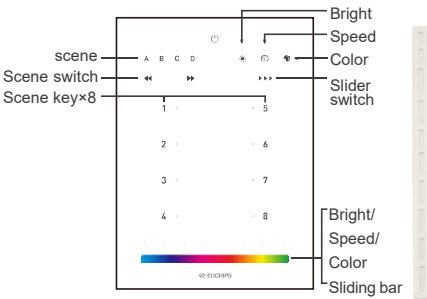
Input Voltage :	5V DC, 0.15A-1A(by USB) / 9-12V DC，0.5A Irrespective of Plus or minus
Power Consumption :	< 2W
Connection :	USB 2.0 , Ethernet，Plug-in port (power supply)
Output connector :	RJ45
Transmission signal :	DMX512/1990
Output channels :	1024 DMX channels
Lamp type :	Wallwashing light,Tube light, Cube light,etc.
OS Requirement :	Windows XP/Vista/Seven/Win10 32/64 1Ghz CPU, 512 MB RAM
PC Software :	Euchips X-DMX
Environment :	IP20, -25℃ to 70 ℃
Storage space:	microSD card, Max. 8GB

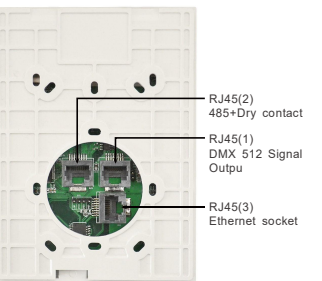
Dimension (mm)





Interface Instruction





RJ45 (1) Power+DMX

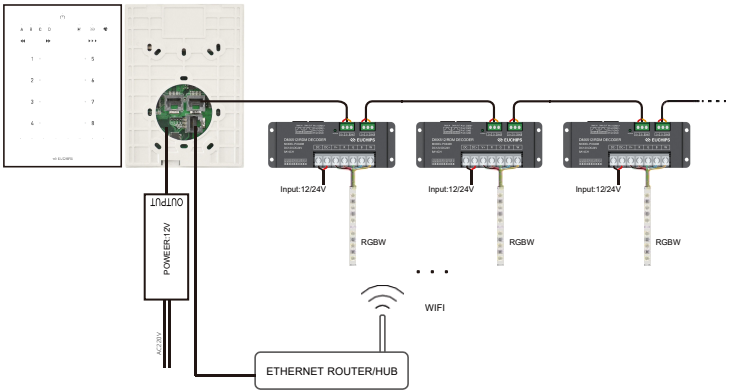
Pin1 : DMX1+
Pin2 : DMX1-
Pin3 : DMX2+
Pin4 : GND
Pin5 : GND
Pin6 : DMX2-
Pin7 : GND
Pin8 : GND

RJ45 (2) 485+Dry contact

Pin1 : 485+
Pin2 : 485-
Pin3 : IO1
Pin4 : IO2
Pin5 : IO3
Pin6 : IO4
Pin7 : GND
Pin8 : GND

RJ45 (3) Ethernet socket

Wiring Diagram



Default Mode

Note:factory default setting with 30 kinds of prodcut models, if use software to edit and download it ,the following sceces will be covered.

NG.	Mode	NG.	Mode
1	Red	16	Six color flash
2	Green	17	RGB flash
3	Blue	18	RG flash
4	Yellow	19	RB flash
5	Cyan	20	GB flash
6	Purple	21	R flash
7	White	22	G flash
8	Seven color fade	23	B flash
9	Full color fade	24	Seven color strobe
10	Rainbow changing	25	Six color strobe
11	Water flowing	26	RGB strobe
12	Tail chase	27	RG strobe
13	Color stack	28	RB strobe
14	Chase(Blue,Purple)	29	GB strobe
15	White flash	30	White strobe

RS485 trigger function

1. RS485 bus triggering scene function

The third party device can control the device through the RS485 bus. Baud rate: 9600, no check,1bit stop.

Receive and send names using fixed length commands, length 15Byte

1.1 Bus support command

Seriel number	Command	OP Code	Description	Memory function
1	Return value switch	0x01	Set whether DMX-X03 has ACK	NVM,Memory function
2	Resume\Pause	0x02	Pause playback and resume playback	RAM, Boot defaults to continue
3	Scene call	0x03	Scene call	NVM,Memory function
4	ON\OFF control	0x04	On / off control	RAM, Default ON
5	Get \ set device number	0x05	Stand-alone connection settings	NVM,Memory function

NVM:Nonvolatile memory, power down memory;
RAM:Loss of memory, power failure to enter the default state;

1.2 485 Bus command format

->DMX-P09

Byte0	Byte1	Byte2	Byte3	Byte4	Byte5	Byte6	Byte7
'E'	'U'	Device code	Device No	CMD	SubCMD	Para0	Para1
Byte8	Byte9	Byte10	Byte11	Byte12	Byte13	Byte14	
Para2	Para3	Para4	Para5	Para6	Para7	CRC	

<-DMX-P09

Byte0	Byte1	Byte2	Byte3	Byte4	Byte5	Byte6	Byte7
'E'	'U'	Device code	Device No	ACKCMD	SubCMD	Para0	Para1
Byte8	Byte9	Byte10	Byte11	Byte12	Byte13	Byte14	
Para2	Para3	Para4	Para5	Para6	Para7	CRC	

Device NO: 0xFF , Broadcast ALL Device ;

Check Sum the calculation function is as follows :

```
unsigned char CRCCalc(void* DataBuf,unsigned char Length)
    {
        u16 i;
        u8 sum, CRCValue;
    sum = 0;
        for(i = 0; i < Length; i++) {
            sum += *((u8*)DataBuf+i);
        }
        CRCValue = -sum;
        return CRCValue;
    }
```

1.3 RS485Bus command description :

1.3.1 Return value switch command(0x01) :

CMD:0x01

Byte0	Byte1	Byte2	Byte3	Byte4	Byte5	Byte6	Byte7
'E'	'U'	Device code	Device No	CMD	SubCMD	0	0
Byte8	Byte9	Byte10	Byte11	Byte12	Byte13	Byte14	
0	0	0	0	0	0	CRC	

CMD: 0x01, SubCMD : 0x00, ACK OFF, 0x01, ACK ON;

ACKCMD: 0x81

Byte0	Byte1	Byte2	Byte3	Byte4	Byte5	Byte6	Byte7
'E'	'U'	Device code	Device No	ACKCMD	Status	0	0
Byte8	Byte9	Byte10	Byte11	Byte12	Byte13	Byte14	
0	0	0	0	0	0	CRC	

Status: 0x0 CMD Failure, 0x01 CMD Success

1.3.2 Resume\Pause command(0x02) :

CMD:0x02

Byte0	Byte1	Byte2	Byte3	Byte4	Byte5	Byte6	Byte7
'E'	'U'	Device code	Device No	CMD	SubCMD	0	0
Byte8	Byte9	Byte10	Byte11	Byte12	Byte13	Byte14	
0	0	0	0	0	0	CRC	

SubCMD: 0x01 Suspend, 0x00, Run

Without Memory function, default status is run, after power on

ACKCMD: 0x82

Byte0	Byte1	Byte2	Byte3	Byte4	Byte5	Byte6	Byte7
'E'	'U'	Device code	Device No	ACKCMD	Status	0	0
Byte8	Byte9	Byte10	Byte11	Byte12	Byte13	Byte14	
0	0	0	0	0	0	CRC	

Status: 0x0 CMD Failure,0x01 CMD Success

1.3.3 Scene call(0×03):

CMD:0×03

Byte0	Byte1	Byte2	Byte3	Byte4	Byte5	Byte6	Byte7
'E'	'U'	Device code	Device No	CMD	ScnenIDL8	ScnenIDL8	0
Byte8	Byte9	Byte10	Byte11	Byte12	Byte13	Byte14	
0	0	0	0	0	0	CRC	

SceneID=Byte6<<8+Byte5

ACKCMD:0×83

Byte0	Byte1	Byte2	Byte3	Byte4	Byte5	Byte6	Byte7
'E'	'U'	Device code	Device No	ACKCMD	Status	0	0
Byte8	Byte9	Byte10	Byte11	Byte12	Byte13	Byte14	
0	0	0	0	0	0	CRC	

Status:0×0 CMD Failure, 0×01 CMD Success

1.3.4 ON/OFF control (0×04):

CMD: 0x04

Byte0	Byte1	Byte2	Byte3	Byte4	Byte5	Byte6	Byte7
'E'	'U'	Device code	Device No	CMD	SubCMD	0	0
Byte8	Byte9	Byte10	Byte11	Byte12	Byte13	Byte14	
0	0	0	0	0	0	CRC	

SubCMD:0×00 ON, 0×01 OFF

Without Memory function, default status is ON, after power on

ACKCMD: 0x84

Byte0	Byte1	Byte2	Byte3	Byte4	Byte5	Byte6	Byte7
'E'	'U'	Device code	Device No	ACKCMD	Status	0	0
Byte8	Byte9	Byte10	Byte11	Byte12	Byte13	Byte14	
0	0	0	0	0	0	CRC	

Status: 0×0 CMD Failure, 0×01 CMD Success

1.3.5 Get \ set device number(0×05):

It is used when a single machine is connected , and is used for setting equipment numbers, so that different equipment can be distinguished when multiple machines are used together.

CMD:0x05,

Byte0	Byte1	Byte2	Byte3	Byte4	Byte5	Byte6	Byte7
'E'	'U'	Device code	Device No	CMD	SubCMD	Para0	0
Byte8	Byte9	Byte10	Byte11	Byte12	Byte13	Byte14	
0	0	0	0	0	0	CRC	

Device No:0xFF, Broadcast or specify equipment number modification;

SubCMD:

0x00 :Get device number,Para0: 0x00

0x01 :Set device number,Para0:Device number

Installation Guide

1. Mount an electrical box inside the wall
DMX-P09 can be installed in any standard electrical box,you can insert the adapter inside or outside the electrical box

2. To lock the back cover on the electrical box and fix it with the screwdrive

3.Connect the wires

DMX: Connect the DMX cable to the lighting recivers

4.To lock the glass panel and fix it with the screwdrive