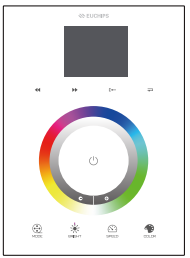
DMX Live And Stand Alone Controller
DMX-P08

Product Features



·Meets DMX512/1990
·1024 DMX Channels.Control 340 RGB Fixtures
·For adjusting the full-color ,tunable white and brightness
·Real time clock and calendar for time triggers
·USB connectivity for programming and control
·8GB Micro SD card for stand alone use
·4 Dry contact triggers(on RJ45)
·Support third party 485 protocol trigger(on RJ45)
·Master/slave mode, connect up to about 50 pcs by Ethernet
·iPhone/iPad/Android remote

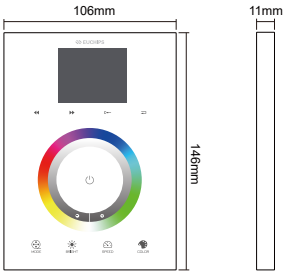
Summary

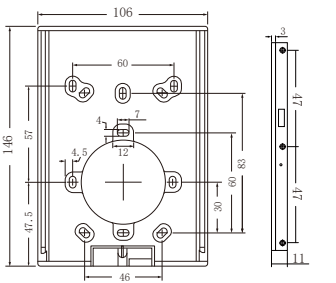
DMX-P08 is a full-color LED DMX control system which focuses on indoor and outdoor decorative lighting, which can be used stand alone or with computer. It comprises scene-edit software.You can edit various lighting effects by downloading the programme which edit according to your special requirement from your PC.This control system can fulfill 256 grey levels for each R,G,B color,totally 16.77 million real full-color.The software has been developed specially for architectural lighting and features easy to use effects which can be dropped onto timelines,along with multi-zone and synchronization allowing you to program a project with multiple rooms and areas with ease.

Technical Parameters

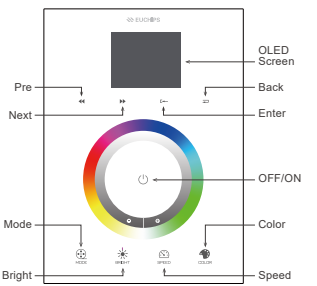
Input Voltage :	5V DC, 0.15A-1A(by USB) / 12V DC input on RJ45
Power Consumption :	< 2W
Connection :	USB 2.0 , Ethernet
Output connector :	RJ45
Transmission signal :	DMX512/1990
Output channels :	1024 DMX channels
Stand Alone mode :	1024 DMX channels
Lamp type :	Wallwashing light,Tube light, Cube light,etc.
OS Requirement :	Windows XP/Vista/Seven/Win10 32/64 1Ghz CPU, 512 MB RAM
PC Software :	Euchips X-DMX
Environment :	IP20, -25℃ to 70 ℃

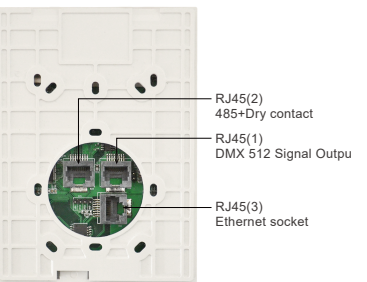
Dimension (mm)





Interface Instruction





RJ45 (1)
Power+DMX

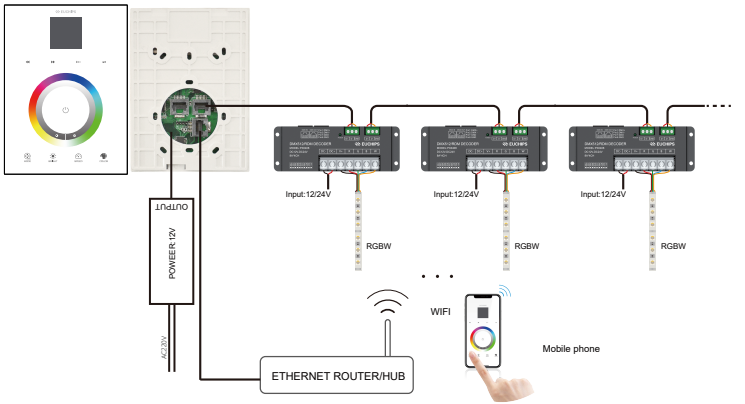
Pin1 : DMX1+
Pin2 : DMX1-
Pin3 : DMX2+
Pin4 : 12V
Pin5 : 12V
Pin6 : DMX2-
Pin7 : GND
Pin8 : GND

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-X03

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-X03

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	

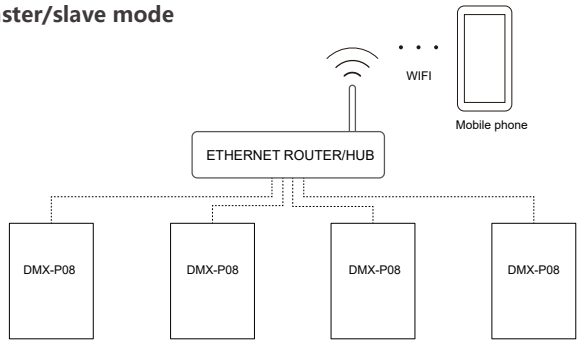
Device No:0xFF, Broadcast or specify equipment number modification;

SubCMD:

0x00 :Get device number,Para0: 0x00

0x01 :Set device number,Para0:Device number

Master/slave mode



Configuration of the master/slave

When multiple devices are cascaded, all devices need to be connected to the same local area network (i.e., the same router) with network cables. Each device will automatically acquire an independent IP address in the local area network. as shown in the following figure, you can see in the about interface, when all the IP addresses of the devices are acquired, you can select any one of the devices to set as the master (with the master option √), and the other devices will be set as the slave control by default. the master will trigger the operation and then pass it to the slave control. However, the split control is out of sync with the master control when controlling the scene to be played by itself. Therefore, the sub-control can start and play different scenes. The main controller is like an ordinary remote controller to control other sub - controllers.

Note: when setting up the master control on the LAN, only one of them can be selected as the master control, and not more than one can be selected at the same time.

Installation Guide

1. Mount an electrical box inside the wall
DMX-P08 can be installed in any standard electrical box,you can insert the adapter inside or outside the electrical box

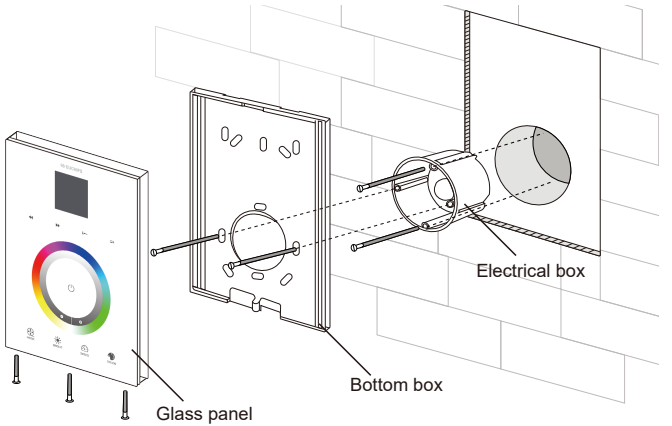
2. To lock the back cover on the electrical box and fix it with the screwdrive

3.Connect the wires

DMX: Connect the DMX cable to the lighting recivers

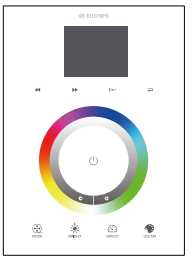
Power: Make sure to not invert the + and the ground

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


Electrical box
Bottom box
Glass panel

DMX 联机和独立控制面板
DMX-P08

产品特点



·符合DMX512/1990国际标准协议
·1024 DMX 输出通道，可以控制340个RGB灯具
·可以调节全彩，色温，单色等多种灯具
·实时的时钟和日历触发功能
·可通过USB进行编程和联机控制
·内置8G高速存储卡用于独立控制
·4个外部干触点和一组485外部触发（RJ45）
·主从模式，采用局域网可以互联50台设备
·iPhone/iPad/Android 遥控控制

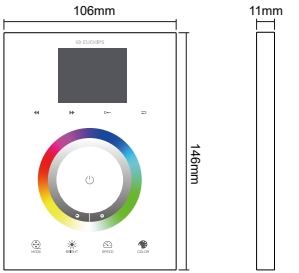
概述

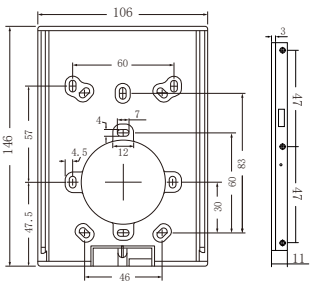
EUCHIPS® DMX-P08是一套用于控制建筑室内外亮化的全彩LED DMX控制系统，可以在联机和独立两种模式下工作。它包含场景编辑程序，根据不同的需求可以通过电脑下载的程序编辑各种灯光效果。该控制系统实现R,G,B各256级灰度，共可表现1677万种颜色，真正显示全彩色。

技术参数

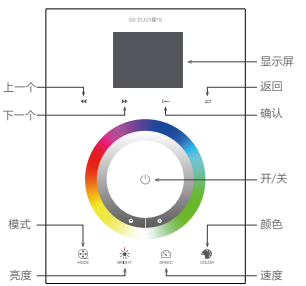
输入电压：	5V DC, 0.15A-1A(USB供电) / 12V 直流输入（on RJ45）
待机功耗：	< 2W
连接方式：	USB 2.0，网口
输出接口：	RJ45
传输信号：	DMX512/1990
输出通道：	1024 DMX channels
独立模式：	1024 DMX channels
灯具类型：	Wallwashing light,Tube light, Cube light,etc.
系统要求：	Windows XP/Vista/Seven/Win10 32/64 1Ghz CPU, 512 MB RAM
编程软件：	Euchips X-DMX
使用环境：	IP20, -25℃ to 70 ℃

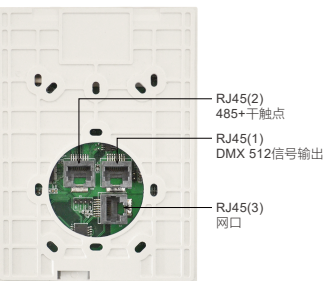
产品尺寸





端口介绍





RJ45 (1)
供电+DMX

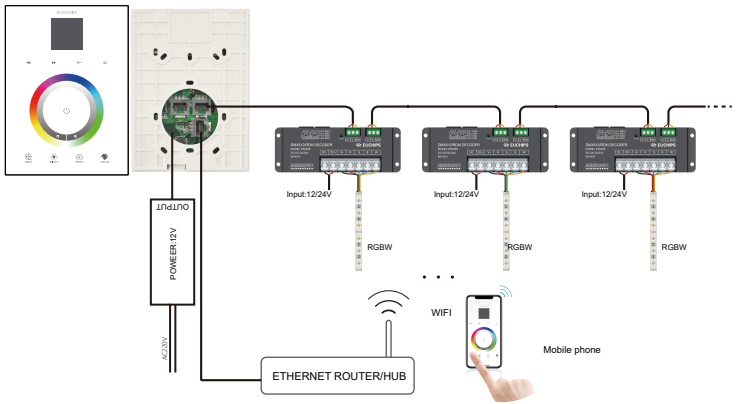
Pin1：DMX1+
Pin2：DMX1-
Pin3：DMX2+
Pin4：12V
Pin5：12V
Pin6：DMX2-
Pin7：GND
Pin8：GND

RJ45 (2)
485+干触点

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

RJ45 (3)
网口

接线方式



内置模式

注：出厂时产品默认自带以下30种模式，若使用软件进行编程下载，以下场景将会被覆盖。

序号.	模式	序号.	模式
1	红色	16	六色忽明忽暗
2	绿色	17	红绿蓝忽明忽暗
3	蓝色	18	红绿忽明忽暗
4	黄色	19	红蓝忽明忽暗
5	青色	20	绿蓝忽明忽暗
6	紫色	21	红色忽明忽暗
7	白色	22	绿色忽明忽暗
8	七彩渐变	23	蓝色忽明忽暗
9	全彩渐变	24	七彩跳变
10	彩虹变化	25	六彩跳变
11	流水变化	26	红绿蓝跳变
12	追尾	27	红绿跳变
13	颜色堆积	28	红蓝跳变
14	追逐（蓝，紫）	29	绿蓝跳变
15	白色忽明忽暗	30	白色跳变

RS485 触发说明

1. RS485总线触发场景功能

第三方设备可以通过RS485总线控制设备。波特率：9600，无校验，1位停止位。

接收、发送命名采用定长命令，长度15Byte。

1.1 总线支持命令

序号	命令	OP Code	描述	记忆功能
1	返回值开关	0x01	设置DMX-X03是否有ACK	NVM,带记忆功能
2	继续/暂停	0x02	暂停播放/继续播放	RAM,开机默认继续
3	场景调用	0x03	场景调用	NVM,带记忆功能
4	ON\OFF控制	0x04	ON\OFF控制	RAM,开机默认ON
5	获取/设置设备号	0x05	单机连接设置	NVM,带记忆功能

NVM：非易失存储器，掉电记忆； RAM：失存储器，掉电进入默认状态；

1.2 485 总线命令格式

->DMX-X03

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-X03

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 RS485总线命令说明：

1.3.1 返回值开关指令(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 继续\暂停指令(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 场景调用(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 控制 (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 获取 \ 设置设备号(0×05):

在单机连接时候使用，用于设置设备编号，方便多机一起使用时候分不同设备

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	

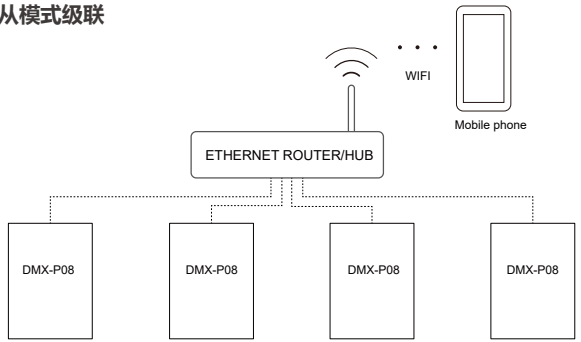
Device No:0xFF, 广播或者指定设备编号修改;

SubCMD:

0x00 :获取设备编号,Para0: 0x00

0x01 :设置设备编号,Para0:设备编号

主/从模式级联



主从功能配置

当多个设备级联时，需要将设备用网线全部接到同一个局域网内（即同一个路由器）。每个设备在局域网中会自动获取一个独立的IP地址，如下图，在About界面下可以看到，当所有设备的IP地址都获取到以后，可以选择其中的任何一台设置为主控（将Master选项打钩），则其他的设备默认设置为分控，在主控进行触发操作再传递给分控。然而，分控在控制自身播放场景的时候和主控是不同步的。因此，分控可以触发和播放不同的场景。主控就像一个普通的遥控器来控制其他的分控。

注：在局域网设置主控时，只能选择其中某一台作为主控，不能同时选中多台。

安装说明

1. 在墙体上安装电器盒（DMX-P08可以安装在标准的电器盒内，电源适配器可以安装在电器盒的内部或者外部）

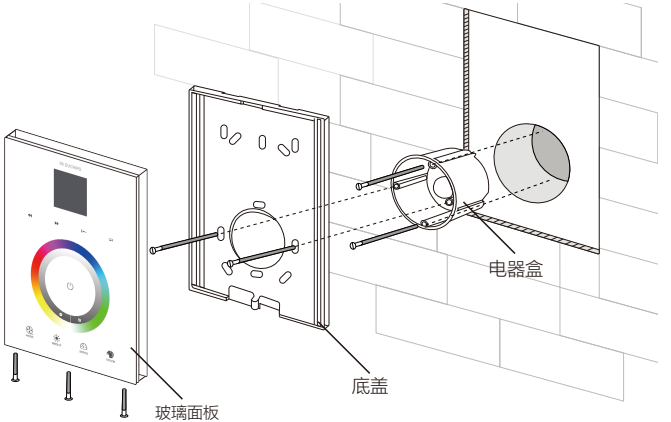
2. 用螺钉将底盖固定在电器盒上，以确保安装牢固

3.连线

DMX: 连接DMX端口信号线

Power: 确保正负极没有接反

4.将玻璃面板固定在底盖上，并从底部用螺钉将玻璃面板和底盖固定


电器盒
底盖
玻璃面板