

# EUA410D

## Summary

Welcome to use EUA410D 0-10V dimming module. This product adopts advanced microcomputer control technology to analyze the DMX512(1990)/RDM widely adopted in the world and the self-developed EU-Bus protocol. It supports RDM address redirection and outputs 4 channels DC 0-10V analog control signals at the same time, with the maximum output signal current of each channel being 100mA.

## Product features

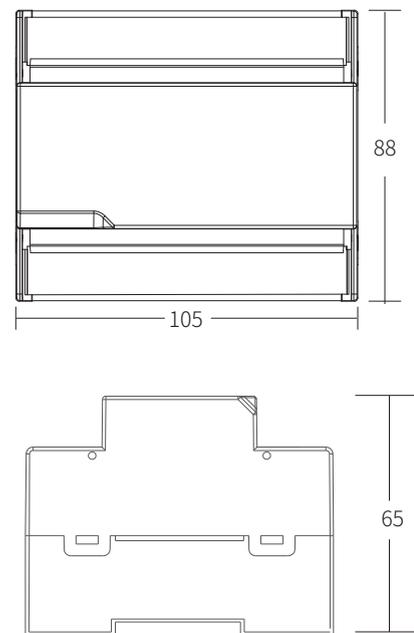
- It conforms to DMX512(1990)/RDM international standard protocol and the self-developed EU-Bus protocol
- Output 4 channels of DC 0-10V analog control signals, and the maximum output signal current of each channel is 100mA
- 0-10V signal plus or minus short connection, the module has short-circuit protection function
- Two signal input interfaces: green terminal and RJ45 network port
- In DMX mode, RDM function is supported, and the address can be changed by upper computer software
- Arbitrarily change DMX address and switch input signal mode by dialing the code key
- Small volume, standard 35mm guide housing, easy to install
- Applicable to smart home, office, school, hotel, stadium, building outdoor scene and other occasions Ming control

## Technical parameters

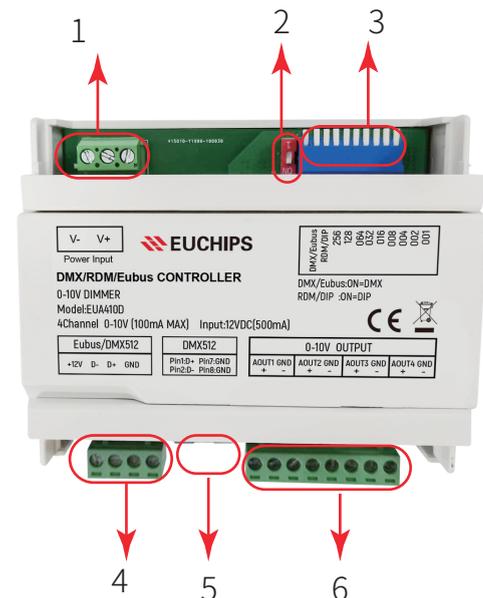
The input voltage	12V
Input control signal	DMX512/RDM, EU-BUS signals
Maximum carrying current of 0-10V signal	100 ma * 4 road
The dimming range	1% - 100%.
The equipment size	105*88*65 [L * W * H]
Packing size	125*100*68 [L * W * H]
Working temperature	- 20 °C and 40 °C
The quality assurance	3 years



## Product size (mm)



## Module Function Introduction



- (1) AC power input terminal
- (2) Red dial code key to switch DMX512 and EU-BUS input signals
- (3) Blue dial code key, DMX512 mode to set the address
- (4) DMX512/RDM, EU-Bus signal input terminal and 12V DC output terminal
- (5) RJ45 network port, DMX512/RDM signal input port
- (6) 4-way 0-10V signal output port

**Control mode**

**Input signal mode switch**

Dial position (ON/1)	Signal input mode
ON	DMX mode
1	EU - BUS mode

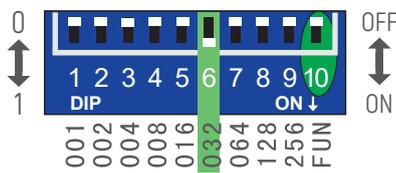
Note: The switch between DMX mode and EU-Bus mode can only be done in the case of power failure. In EU-Bus mode, the blue dial code key can be dialed to any position.

**Dmx512 Mode**

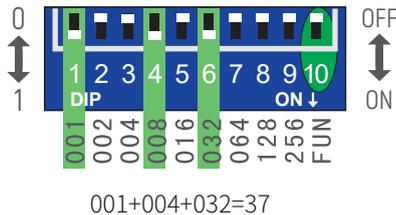
Only when the red dial code key dials to the "ON" end and the 10th digit of the blue dial code key dials to the "ON" end can address be set (at this time, RDM function is invalid). In DMX mode, each output loop occupies 1 address, and there are altogether 4 loops, that is, one module occupies 4 addresses.

DMX512 initial address code = the sum of the positions of 1-9 bits of the encoding switch, and the position of this bit can be obtained by turning the encoding switch down (ON set 1);The position of the code switch is 0 when it is turned upwards (set to "0").

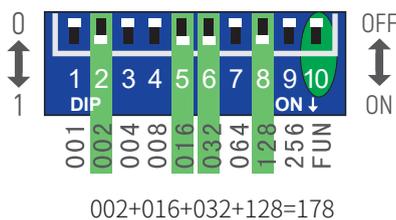
Example 1: Initial address is 32



Example 2: The first address is 37



Example 3: The first address is 178



**RDM function**

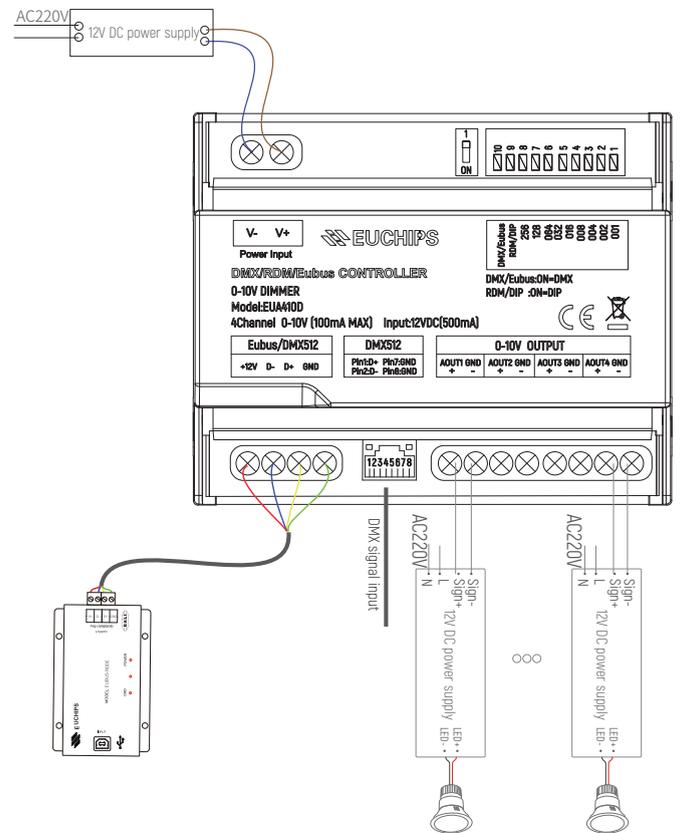
Dial the red dialing code key to the "ON" end, and the blue dialing code key 1-10 bits to the "OFF" end. At this time, the RDM function is effective. Connect to the RDM controller, the first address of the module and the parameters of the reading module can be changed ON the upper computer software.

**EU - BUS mode**

When the red dial code key is dialed to the "1" end, eu-Bus mode is effective and 12V DC output is assisted, so there is no need to connect the external 12V power supply and connect the Ebus-Node debugger to realize grouping and scene control on the upper computer software

**Applied wiring diagram**

The device outputs 100mA signal current per DC 0-10v, and the maximum number of 0-10v dimming power supply per circuit is determined by the current consumed by its dimming signal interface. When the signal current exceeds 100mA, the signal can be amplified through oches' 0-10v signal converter, which can theoretically be connected to countless dimming power supply.



**Matters needing attention**

1. The product shall be tested and installed by qualified personnel.
2. good heat dissipation conditions will prolong the service life of the product, please install the product in a well-ventilated environment.
3. Please check whether the output voltage and current of the LED power supply used meet the product requirements.
4. The diameter of the wire used must be large enough to load the LED lamps to be connected, and the wiring must be firm to avoid overheating or bad contact of the wire.

## EUA410D

### 概述

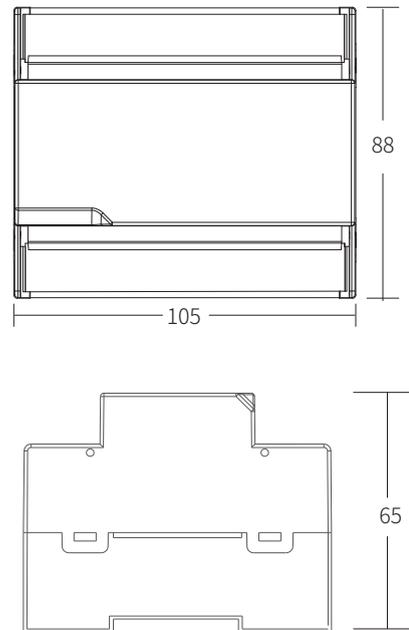
欢迎使用EUA410D 0-10V调光模块,该产品采用先进的微电脑控制技术,解析国际上广泛采用的DMX512(1990)/RDM以及自主研发的EU-BUS协议,支持RDM改地址,同时输出4路DC 0-10V模拟控制信号,每路最大输出信号电流100mA。



### 产品特点

- 符合DMX512(1990)/RDM国际标准协议,以及自主研发的EU-BUS协议
- 输出4路DC 0-10V模拟控制信号,每路最大输出信号电流100mA
- 0-10V信号正负短接,模块具有短路保护功能
- 绿色端子和RJ45网口两种信号输入接口
- DMX模式下,支持RDM功能,且可通过上位机软件改地址
- 通过拨码键,任意改DMX地址和切换输入信号模式
- 体积小,标准35mm导轨外壳,便于安装
- 适用于智能家居、办公室、学校、酒店、体育场馆、建筑外景等场合的照明控制

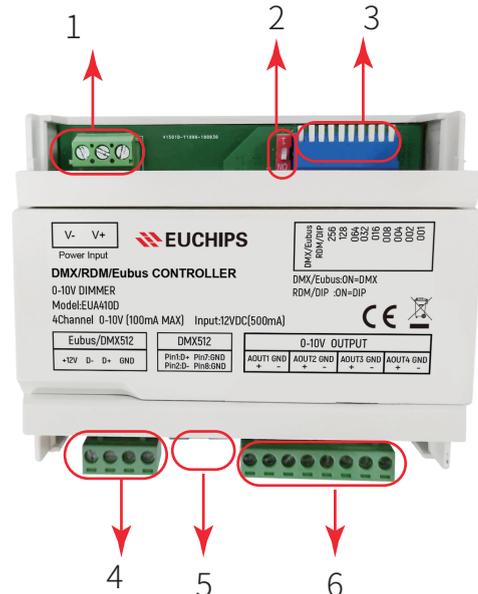
### 产品尺寸(mm)



### 技术参数

名称	参数
输入电压	12V
输入控制信号	DMX512/RDM、EU-BUS信号
0-10V信号最大承载电流	100mA*4路
调光范围	1%-100%
设备尺寸	105*88*65(长*宽*高)
包装尺寸	125*100*68(长*宽*高)
工作温度	-20°C - 40°C
质保	3年

### 模块功能介绍



- (1)交流电源输入端子
- (2)红色拨码键, 进行DMX512、EU-BUS输入信号的切换
- (3)蓝色拨码键, DMX512模式下进行地址设置
- (4)DMX512/RDM、EU-BUS信号输入端子以及12V DC输出端子
- (5)RJ45网口, DMX512/RDM信号输入端口
- (6)4路0-10V信号输出端口

## 控制模式

### 输入信号模式切换

拨码位置(ON/1)	信号输入模式
ON	DMX模式
1	EU-BUS模式

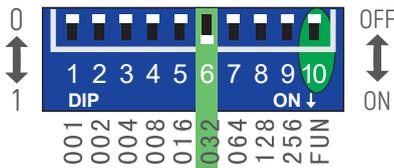
注:必须在断电情况下,才能进行DMX模式和EU-BUS模式的切换,EU-BUS模式下,蓝色拨码键可以拨到任意位置。

### DMX512模式

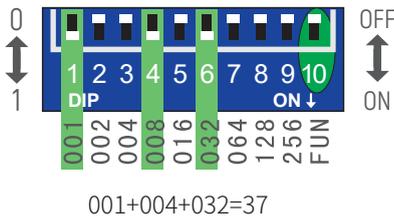
红色拨码键拨到“ON”端,蓝色拨码键的第10位拨到“ON”端,才可进行地址的设置(此时RDM功能无效),DMX模式下,每1个输出回路占1个地址,共4个回路,即一个模块占4个地址。

DMX512起始地址码=编码开关1-9位的位置总和,将编码开关拨向下(ON置1)可获得该位的位置;编码开关拨向上(置“0”)则该位的位置为0。

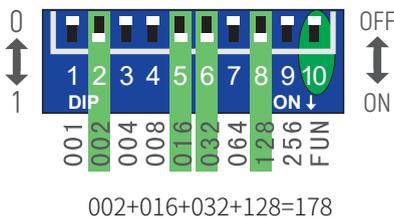
例1:首地址为32



例2:首地址为37



例3:首地址为178



## RDM功能

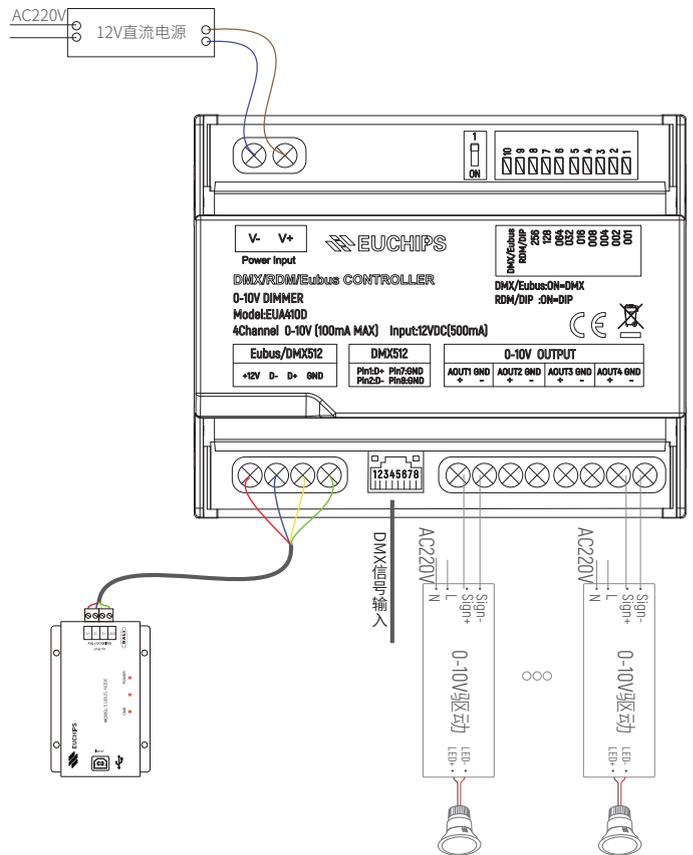
红色拨码键拨到“ON”端,蓝色拨码键1-10位全部拨到“OFF”端,此时RDM功能有效,连接RDM控制器,在上位机软件上就可更改模块的首地址和读取模块的参数。

## EU-BUS模式

红色拨码键拨到“1”端,此时EU-BUS模式有效,有辅助12V DC输出,所以无需再外界接12V电源,连接Ebus-Node调试器,即可在上位机软件上实现分组、场景控制

### 应用接线图

此设备每路DC 0-10V输出100mA的信号电流,每回路所接0-10V调光电源的最大数量由其调光信号接口消耗的电流决定的,当使用信号电流超过100mA时,可以通过欧切斯的0-10V信号转换器将信号放大,理论上可以连接无数个调光电源。



## 注意事项

- 1、本产品请由具有专业资格的人员进行调试安装。
- 2、良好的散热条件会延长产品的使用寿命,请把产品安装在通风良好的环境。
- 3、请检查使用的LED电源输出电压电流,是否符合产品要求。
- 4、使用的电线直径大小必须能够负载连接的LED灯具,并确保接线牢固,以免电线过热或接触不良触。