ART-NET lighting control system

GC-ARTNET is a light controller based on ART-NET protocol。Support international standard ART-NET 3, and backward compatible with ART-NET, ART-NET 2。The controller provides standard 8 sets of DMX512 output and 2 RJ45 network interfaces。GC-ARTNET converts network packets into standard DMX512 signals and various SPI signals.

GC-ARTNET adopts FPGA as the core processor and is equipped with gigabit network transmission interface。The strong data computing ability of FPGA combined with the transmission rate of gigabit network，Receive DMX512 packets from the network，And extend the decoding output，Can support LED lighting market widely used single – wire, dual – wire drive IC，Such as: TM1812，UCS2903，TLS3001 and so on。An output port can also be extended to support 850 points。The output electrical standard includes RS485 and TTL。

GC-Artnet provides a one-button parameter setting tool，Can quickly set the IP address，Port address and other system parameters。The system can support various ART-NET lighting application software at home and abroad, with the use of software, widely used in stage, bar, KTV, TV recording hall, all kinds of theme exhibition hall and all kinds of landscape lighting projects。

The performance characteristics

- FPGA core processor, gigabit network transmission technology
- Based on the international standard ART-NET 3 protocol, it can be backward compatible with ART-NET and ART-NET 2 protocols
- ART-NET network terminal network cable cascading, can use HUB branch parallel, can also be a single network series
- Support optical fiber, switch and other standard network equipment, to meet the needs of various applications
- Network interface adaptive input/output, no distinction, plug and play
- Support ART-NET unicast and ART-NET broadcast mode
- Data optimization and reorganization, provide 8 channels of data output, can support DMX512, TTL, SPI and other lighting industry in all kinds of lighting signal types
- Provide special parameter setting tools, one key set IP address, Port address and other system parameters
- Eight outputs, each can output 5 DMX fields, namely 850 pixel points, support single-wire, dual-wire driver IC, such as: UCS2903, TM1812, TLS3001, UCS8904, etc
- Up to 16bit gray level dimming can be supported
- With the use of software, various kinds of landscape lighting, 3D meteor, music synchronization and other effects can be achieved

Specification

Power input: AC 90~240V

Power consumption: 5 W

Input signal: Artnet network package

Network interface: 1Gbps gigabit network (568B)

Output signal: DMX512, TTL, SPI

Output interface: 8 sets of 3 PIN terminals (①GND, ②DA/D+, ③D-)
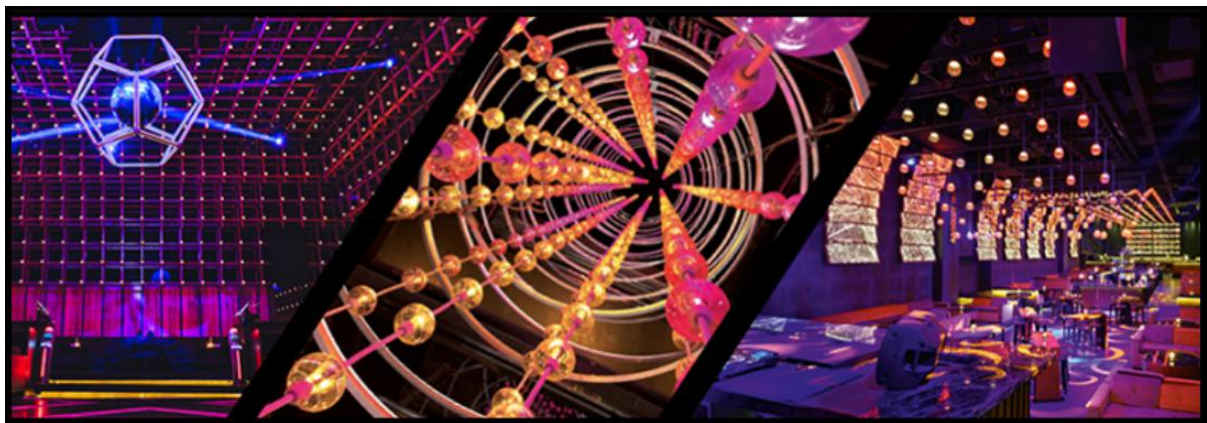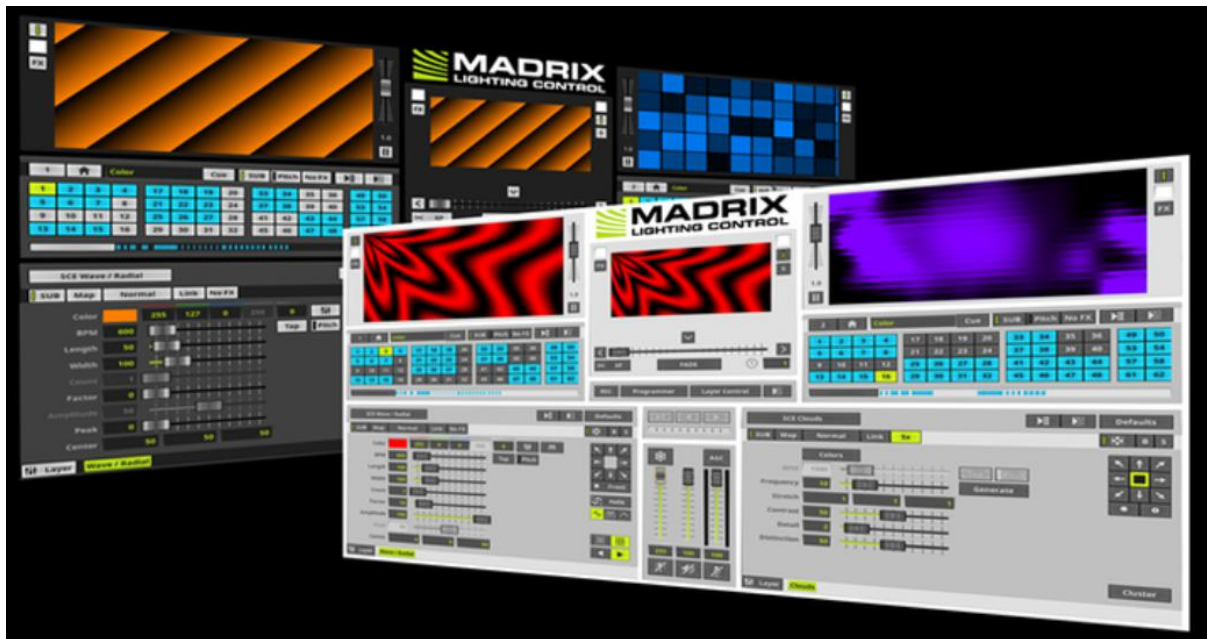
Output port: 8 port

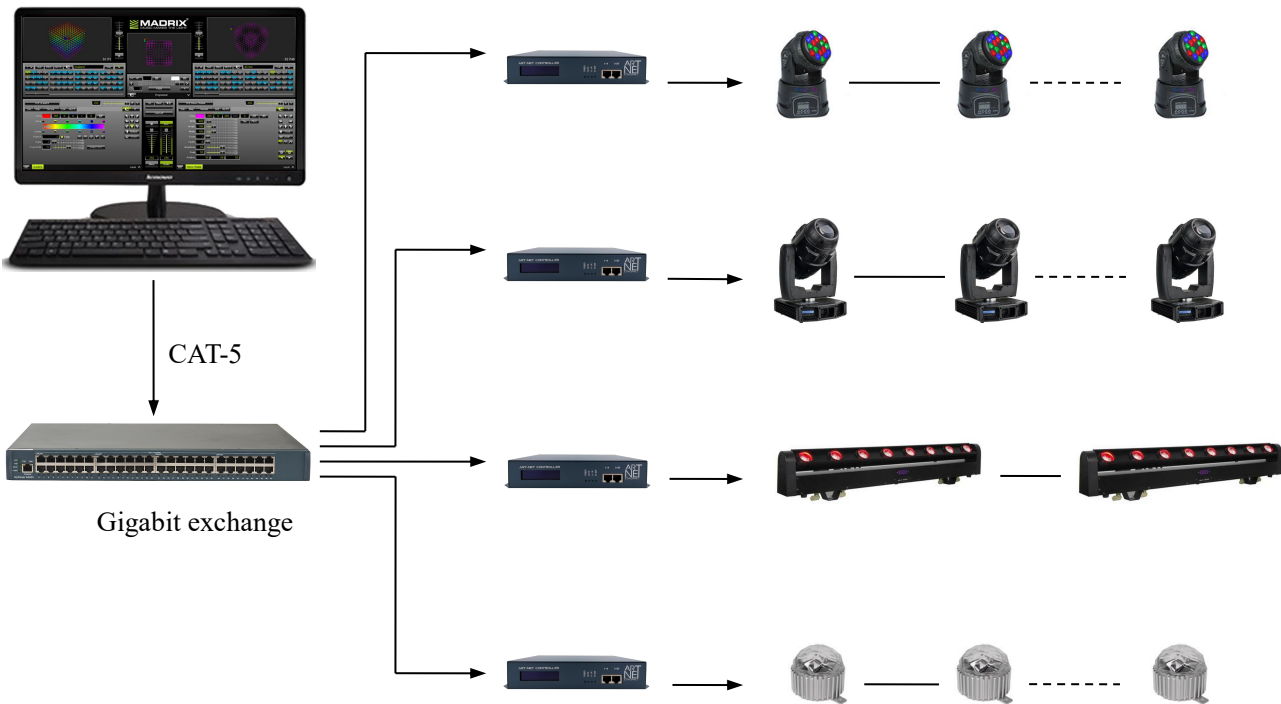Output data: 8 x 850 pixels

Operating temperature: -20℃-65℃

Product size: L234×W165×H42mm

Weight (gross weight) : 1.4kg

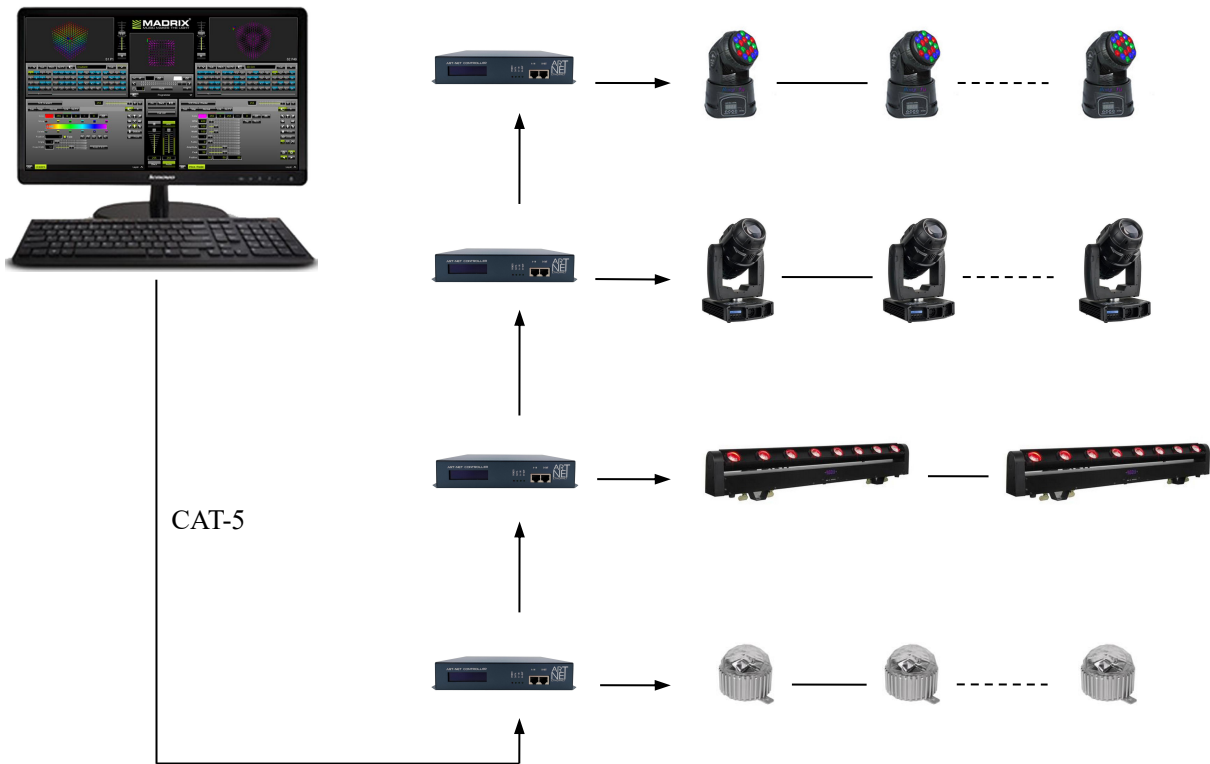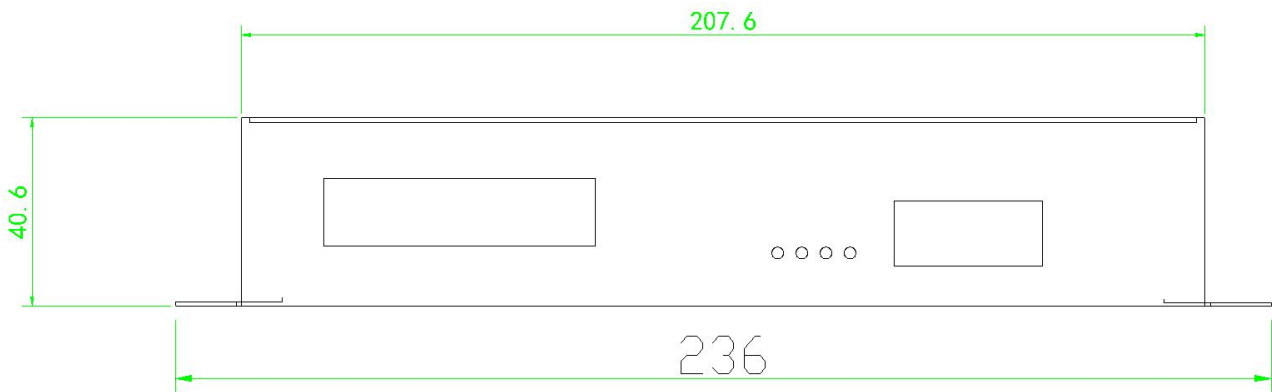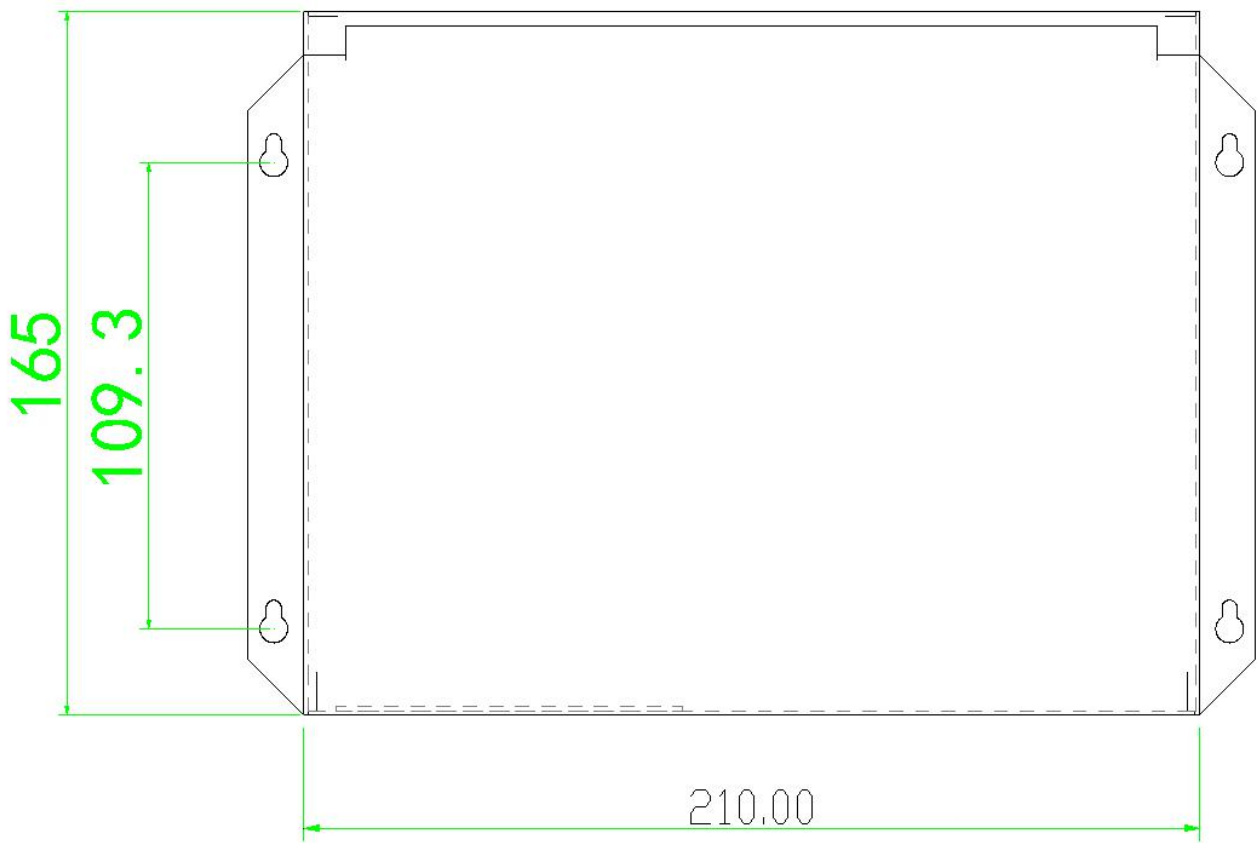# System connection diagram

Branch connection of switch

CAT-5

Gigabit exchange

Single way serial cascade

CAT-5

Controller dimension drawing (unit mm)

Positive view

Top view, installation hole bitmap

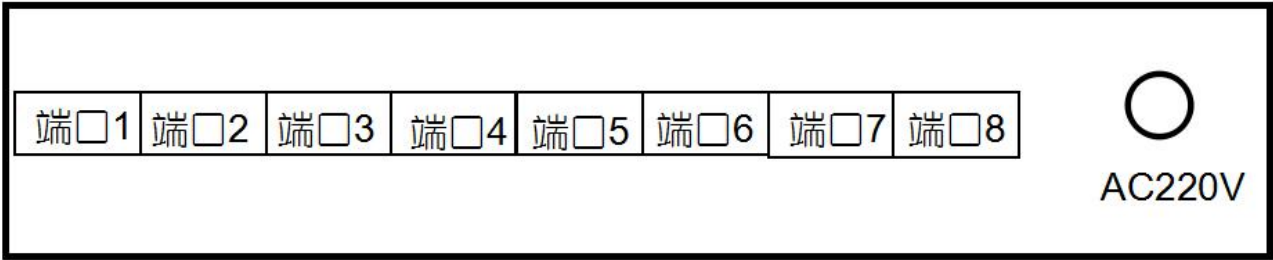# Controller wiring instructions

Input port

SLAVE CONTROLLER

A   B
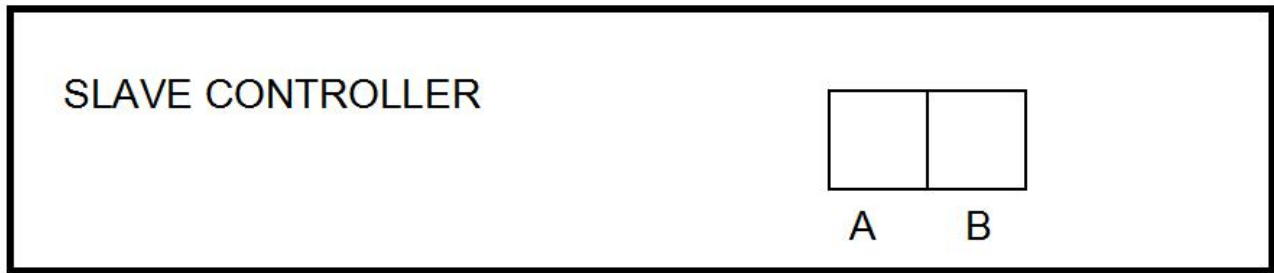
Instructions：

1、Network port A and B do not distinguish, adaptive input and output。

2、The cable pressing method must follow 568B pressing method: facing the copper sheet side, from left to right: orange white, orange, green white, blue, blue white, green, brown white, brown。

3、Computer to sub-control, sub-control to sub-control, network cable distance shall not exceed 80 meters, in case of more than 80 meters, use gigabit switch or no-load sub-controller as signal repeater。

4、Because the system uses full gigabit network, in order to ensure the communication quality of the system, it is suggested to use pure copper network cable。

1 2 3 4 5 6 7 8
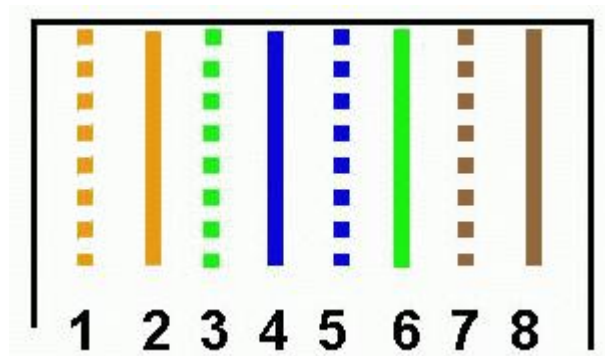
Crystal head line sequence

Output port

Output port wiring instructions

GND D+ D-

GND: ground

D+ : DMX512 signal line A/D+

D - : DMX512 signal line B/D -

For serial TTL lamps, such as 1903/2811 data cable D+

Setup Software Description

Open the software Artnet Setting

After setting the parameters and configuring the sub-controller, the LCD display of

the sub-controller will be updated immediately to view the parameters of the machine.