LED STRIP SPECIFICATION

WS2815 DC12V 120LEDS 4PIN RGB ADDRESSABLE LED STRIP

Product Model: ttl-ws2815-12v-120leds-4pin-rgb

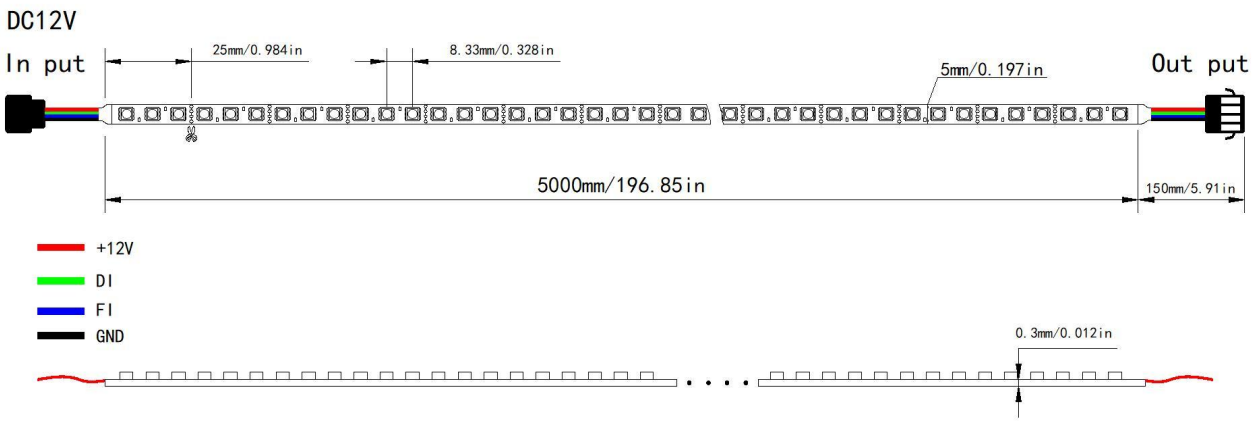
PART 1 Product Specification

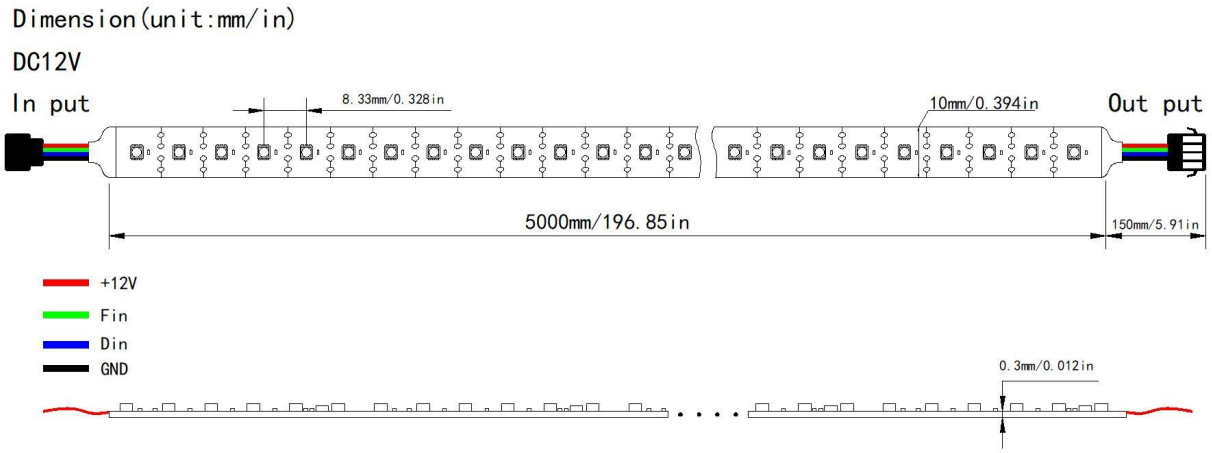
Electrical & Mechanical Parameters

Parameter	Value
Voltage	*DC 12V*
Power	*13W/m*
PCB Width	*5/10 mm*
IP Rated	*IP20 / IP65 / IP67*
Pixel Quantity	*120 pixels/m*

LED Quantity	*120 LEDs/m*
Cutting Unit	*25/16.66 mm*
Break Continue	*Yes*
LED Color	*RGB*
Control Way	*TTL*

PART 2 Product Dimensions





Your brand logo can be printed on the PCB, and custom packaging is supported.

PART 3 Product Features

1. Versatile Customization Options

Choose from a variety of PCB colors and widths. Support for 2oz/3oz heavy copper thickness ensures superior current-carrying capacity for high-power applications.

2. IP20–IP68 Waterproof Ratings

Whether for indoor decoration or harsh outdoor environments, select the perfect ingress protection level to match your project needs.

3. Effortless Peel-and-Stick Installation

Pre-applied 3M VHB adhesive tape on the back allows for instant mounting on any clean, dry, and flat surface. No screws, brackets, or extra labor required—saving you time and installation costs.

4. Long-Term Reliability

Engineered for a 50,000-hour service life, backed by flexible 3-year or 5-year extended warranty options for total peace of mind.

5. Full Branding Support

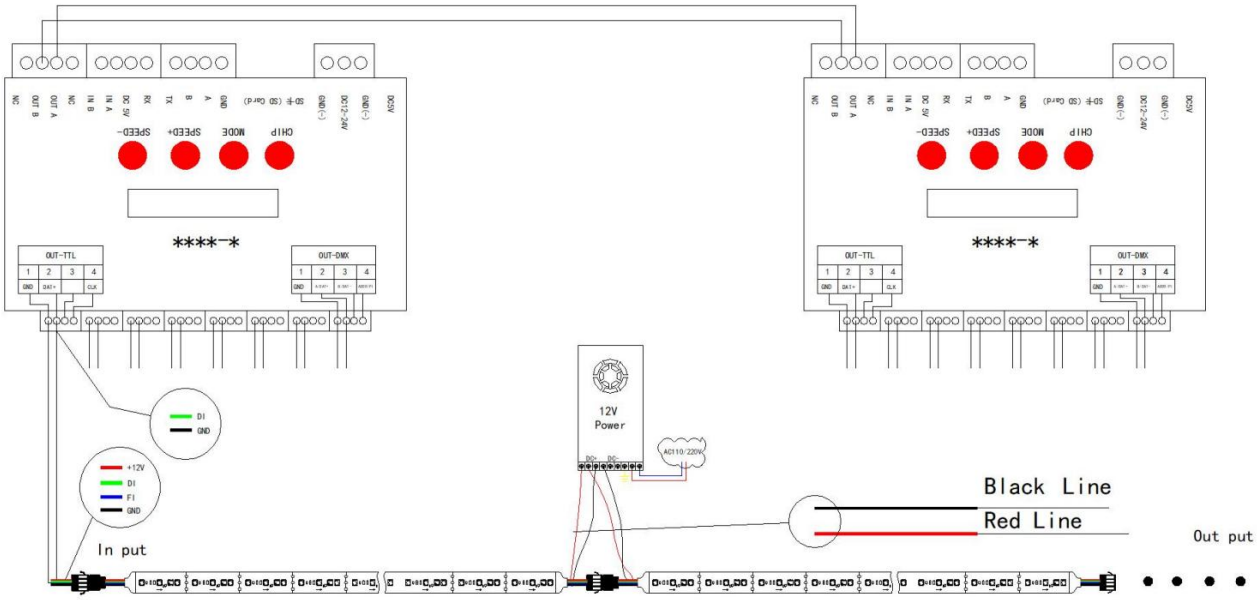
Low MOQ for custom PCB silk-screen printing (your logo) and tailored packaging solutions to strengthen your brand identity.

PART 4 Production Application

It fits a broad range of scenarios: hallway & wall lighting, indoor decorative lighting, entertainment venues, wine cabinet/bar backlighting, ceiling backlighting, LED light box light sources, illuminated signage, aquarium decor, automotive interior lighting, home accent lighting, hotel commercial decor, stage ambient lighting, stair step lighting, showcase display lighting and retail shelf illumination.

PART 5 Wiring Diagram

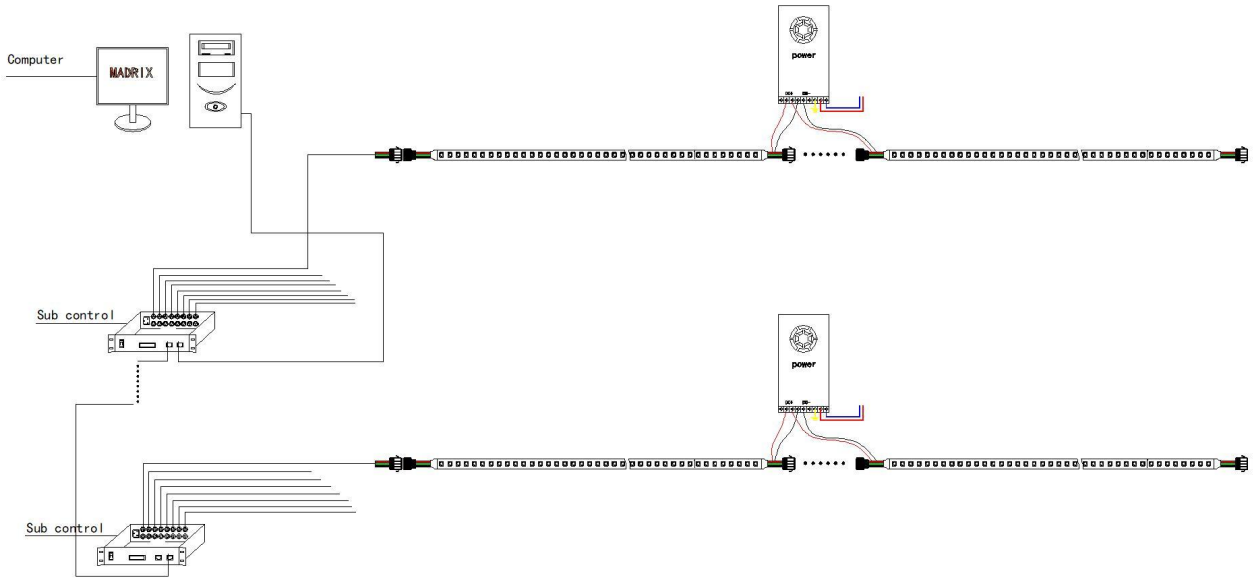
12V Wiring Diagram (4 Pin)



PART 6 Control Diagram and Installation Diagram

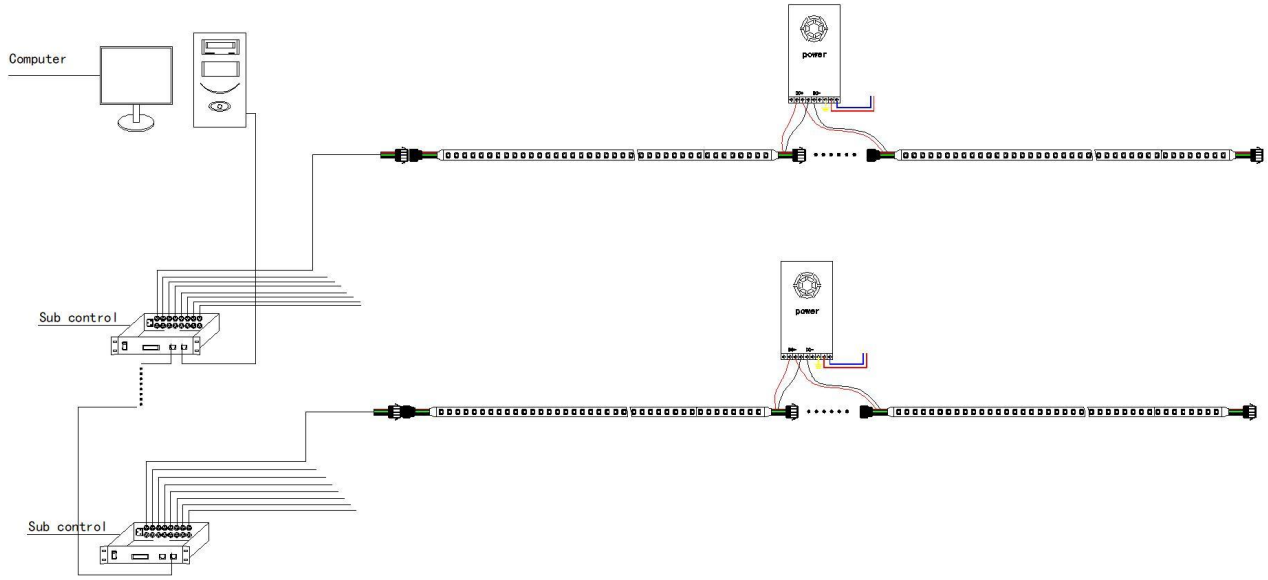
(1) Madrix Control

Recommended controller: T790K, YC3000



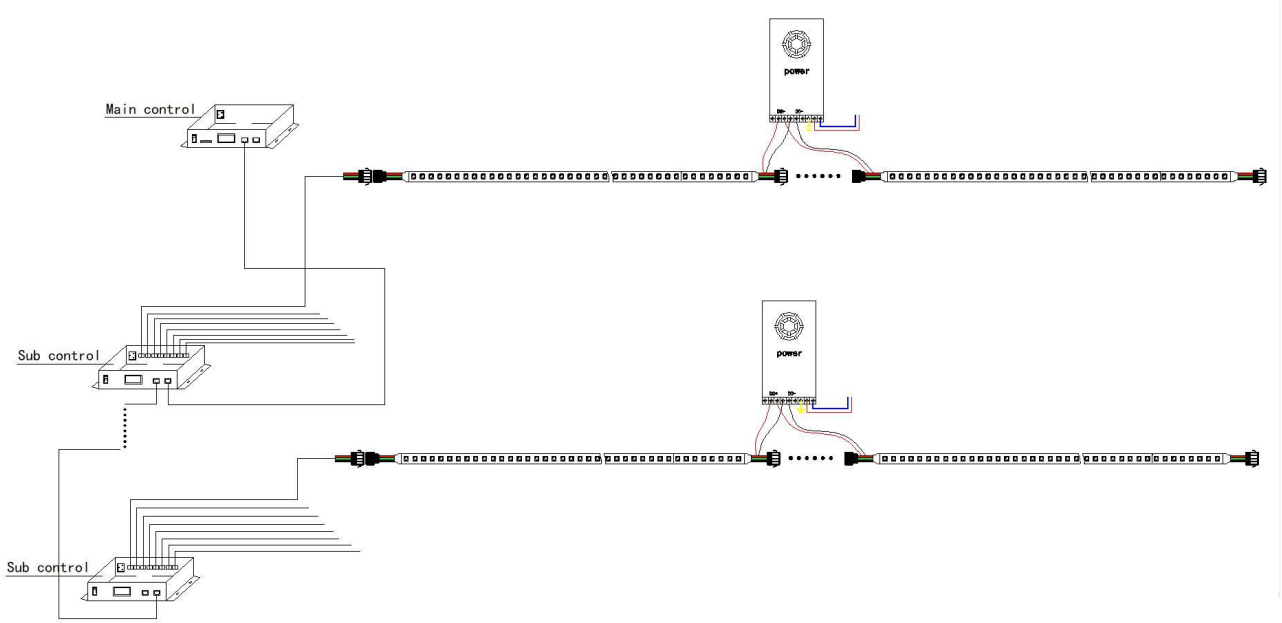
(2) Online Control By Computer

Recommended controller: T-790K



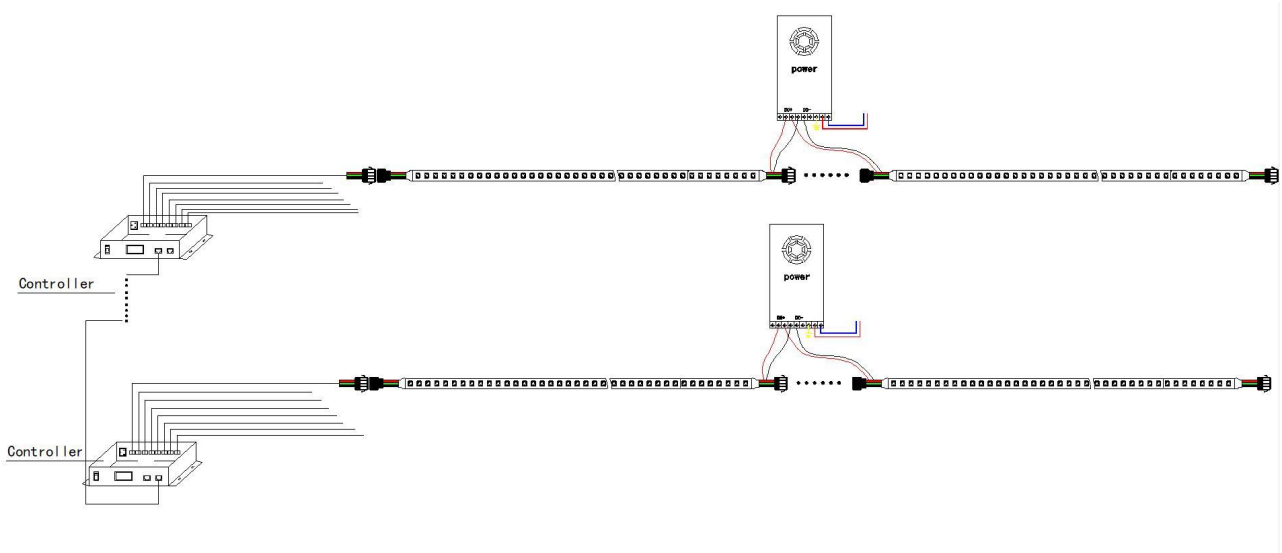
(3) Main control + sub control (Big project)

Recommended controller: Main controller: XB-Z2/MR-BF12B,Sub controller: T-780K/MR-218DW

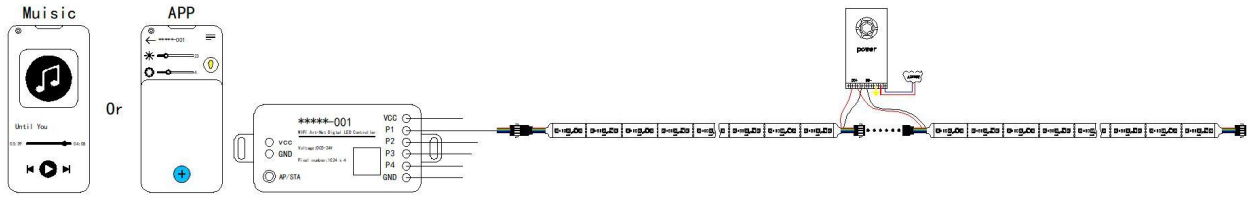


(4) Built-in program Auto loop playback (Small project)

Recommended controller: K-8000C, K-1000C



(5) Mobile phone APP



PART 7 Installation Guidelines

1. *Fully read this manual before starting installation.*
2. *Verify the LED strip's rated voltage matches your switching power supply output voltage prior to installation.*
3. *Follow the strip wiring marks strictly: red for positive (+), black for negative (-), other wires per printed labels. Always cut power off before wiring work.*
4. *Never cut plug cables while powered on, to avoid short-circuit burnout of the strip.*
5. *For controllable LED strips, connect following male-in female-out sequence and keep signal wiring in correct series direction.*
6. *Unauthorized disassembly of the strip voids the manufacturer warranty.*

PART 8 Troubleshooting Guide

1. *Strip fails to power on: Check if the switching power supply outputs rated voltage normally.*
2. *Power supply works fine but strip stays off: Verify signal wiring integrity, plus controller power status and function.*
3. *All above items check out with no light output: Confirm the controller SD card is inserted and loaded with valid programs.*
4. *Strip glitches/flickers: Ensure strip negative terminals are properly paralleled with power supply negative and controller GND.*
5. *If issues persist after full checks, reach out to our sales team for support.*