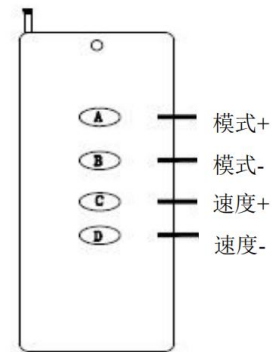


T-500RF Remote Control Instructions

1. The controller and remote are pre-paired at the factory with matching "pairing ID labels" as shown above (Example ID: 1384). A paired remote only controls its matching controller individually. The remote cannot operate controllers with unmatched ID labels. To re-pair a remote with a new controller: Hold down buttons A and D simultaneously, then power on the controller. Release both buttons after 3 seconds to complete pairing.



2. Before the remote can control LED lights, the controller must be configured to match the IC chip model of your LED strip; the remote will have no response if the chip model is mismatched.
3. Button A / Button B: Mode adjustment keys
 - A = Mode + (Next lighting mode)
 - B = Mode - (Previous lighting mode)
4. Button C / Button D: Speed adjustment keys
 - C = Speed + (Faster animation)
 - D = Speed - (Slower animation)
5. Toggle Single-Cycle / Loop Mode: Hold C and D buttons together.
6. One single remote can synchronously control multiple T-500 controllers after pairing.



RF Remote Basic Parameters

1. 4 buttons: A, B, C, D
2. Equipped with RF signal antenna
3. Remote control distance: 10–25 meters (unobstructed line of sight)
4. Dimensions: L90mm × W35mm × H15mm

Controller Technical Specifications

- Operating Temperature: -20°C ~ 60°C
- Input Supply Voltage: DC 12V–24V
- Signal Output Type: TTL / SPI
- Outer Dimensions: 97×62×23 mm
- Net Weight: 85g

- Gross Weight: 105g
- Static Power Consumption: < 1W
- Max Controllable IC Pixel Points: 1024

Main Digital Display Explanation

1. Mode & Speed Adjustment

Display format example: F 28 3

- Letter F = Single lighting mode; Number 28 = Mode No.28; Number 3 = Current animation speed level

-----》 Short press the SET button to switch display letter F to E (Loop cycle mode).

- Press Mode+/Mode- to switch between all built-in modes (Total 108 lighting styles)
- Press Speed+/Speed- to adjust animation speed (8 adjustable speed grades)

2. Power Wiring Definition

- V+ (Power +): Connect to positive terminal of DC12–24V switching power supply
- V- (Power -): Connect to negative terminal of DC12–24V switching power supply
- GND: Global signal ground
- DAT-A / DAT-B: TTL full-color data signal output terminals

Operation Guide

I. IC Chip Model Selection

1. Long press the SET button for 3 seconds and release to enter IC selection page (Display shows: 512H / 512L / 1903 / 1914)
2. Press Mode+/Mode- to toggle available IC models, which will show on the digital screen. Supported IC protocols:

- 512H (500K signal)
- 512L (250K signal)
- 1903 (compatible with identical protocol chips)
- 1914

II. Pixel Point Quantity Configuration

1. Long press SET for 3s; screen will show your previously selected IC model
2. Short press SET once more to enter pixel setting page (Display format: LXXX)
3. Adjust pixel count:
 - Mode+/Mode-: Increase/decrease pixel count by 1 pixel per press
 - Speed+/Speed-: Increase/decrease pixel count by 10 pixels per press Max supported pixel quantity: 1024 (Display example: L-001)

III. LED Channel Sequence Modification

1. Long press SET for 3s, screen will show your previously selected IC model
2. Short press SET twice press SET to enter channel order page (Display: RGB)
3. Press Mode+/Mode- to choose right channel sequences: RGB / RBG / GRB / GBR / BRG / BGR

IV. RGB / RGBW 4-Color Mode Switch

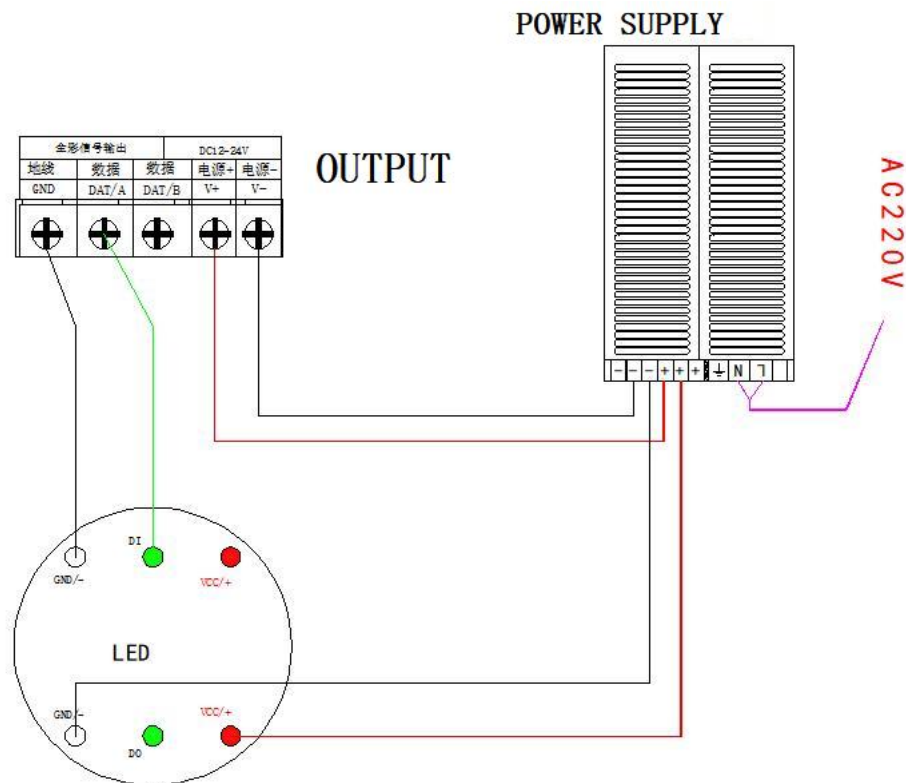
Only available when channel page is set to CH-1. Set CH--0 for standard 3-color RGB strips.

1. Long press SET for 3s, screen will show your previously selected IC model
2. Short press SET three times to enter color channel page (Default display: CH--0 = 3-color RGB mode) CH--1 ~ CH--4 represent RGBW 4-color strips with different white channel positions
3. Press Mode+/Mode- to switch CH channel numbers
 - CH--1: WRGB
 - CH--2: RWGB
 - CH--3: RGWB
 - CH--4: RGBW
4. Short press SET again to enter white light function setting page (Display: Cd--X):
 - Cd--1: Disable white channel (W light off permanently)
 - Cd--2: Energy-saving mode: White brightness follows RGB composite value; W only lights when all RGB channels reach maximum brightness
 - Cd--3: High-brightness mode: White channel synchronously lights up with any RGB color output
 - Cd--4: Pure white animation mode: Only white channel illuminates
 - Cd--5: Independent white mode: RGB strips display full-color animation separately; RGBW strips show independent pure white animation

V. Single RGB Channel Brightness Calibration

1. Long press SET for 3s to load saved IC settings
2. Short press SET 4 times to adjust Red channel value (Display: R255) Short press SET 5 times to adjust Green channel value (Display: G255) Short press SET 6 times to adjust Blue channel value (Display: B255)
3. Brightness adjustment rules:
 - Mode+/Mode-: Increase/decrease brightness value by 1 per press
 - Speed+/Speed-: Increase/decrease brightness value by 10 per press Adjustment range: 0 ~ 255

Wiring Diagram Instruction



1. Switching Power Supply: Input AC220V mains power on L/N terminals; Output DC positive to controller V+, DC negative to controller V-
2. Controller Output Terminals:
 - GND: Connect to LED light GND / negative signal wire
 - DAT-A / DAT-B: Connect to LED strip DI data input wire
3. LED Light Module Definition:
 - VCC/+: Positive power supply
 - GND/-: Negative power & signal ground
 - DI: Data input port (connect to controller DAT-A/DAT-B)
 - DO: Data output port (cascade to next LED strip DI terminal)