TC600 Bluetooth Pixel & PWM Controller User Manual



The TC600 is a mini full-color controller with wireless Bluetooth, supporting Android/iOS apps and a WeChat mini program with Chinese/English UI. It drives mainstream TTL/SPI pixel chips and also single-color, dual-color, 7-color and 5-color (RGBCW) PWM fixtures.

Product Parameters

Operating voltage	DC 5 – 24 V	**Control mode**	APP / WeChat mini program (Bluetooth)
Dimensions	L58 × W78 × H22 mm	**Load type**	TTL pixels 600 pts + PWM dimming
PWM output	8 A/channel; 5 channels total < 20 A	**TTL output**	600 pixels

Key Features

1. TTL/SPI pixel chips: UCS1903, WS2812, SM16703, etc.
2. Matrix animation, dynamic effects, static color tuning, music rhythm, custom editing.
3. Single-color, dual-color, 3-channel, 4-channel, 5-channel fixtures.
4. RGBCW 5-channel PWM output: 8 A per channel, total < 20 A; external amplifier supported above 20 A.
5. Mixed control of TTL/SPI pixels and PWM fixtures.
6. Channel correction and online matrix layout.
7. Timer on/off, power-on state recall, OTA firmware upgrade.
8. Multi-device group control.

App Download

Search for **"Bluehor Lighting Control System"** in the App Store (iOS); scan the Android QR code or WeChat mini-program QR code shown in the original manual.

Connecting the Device

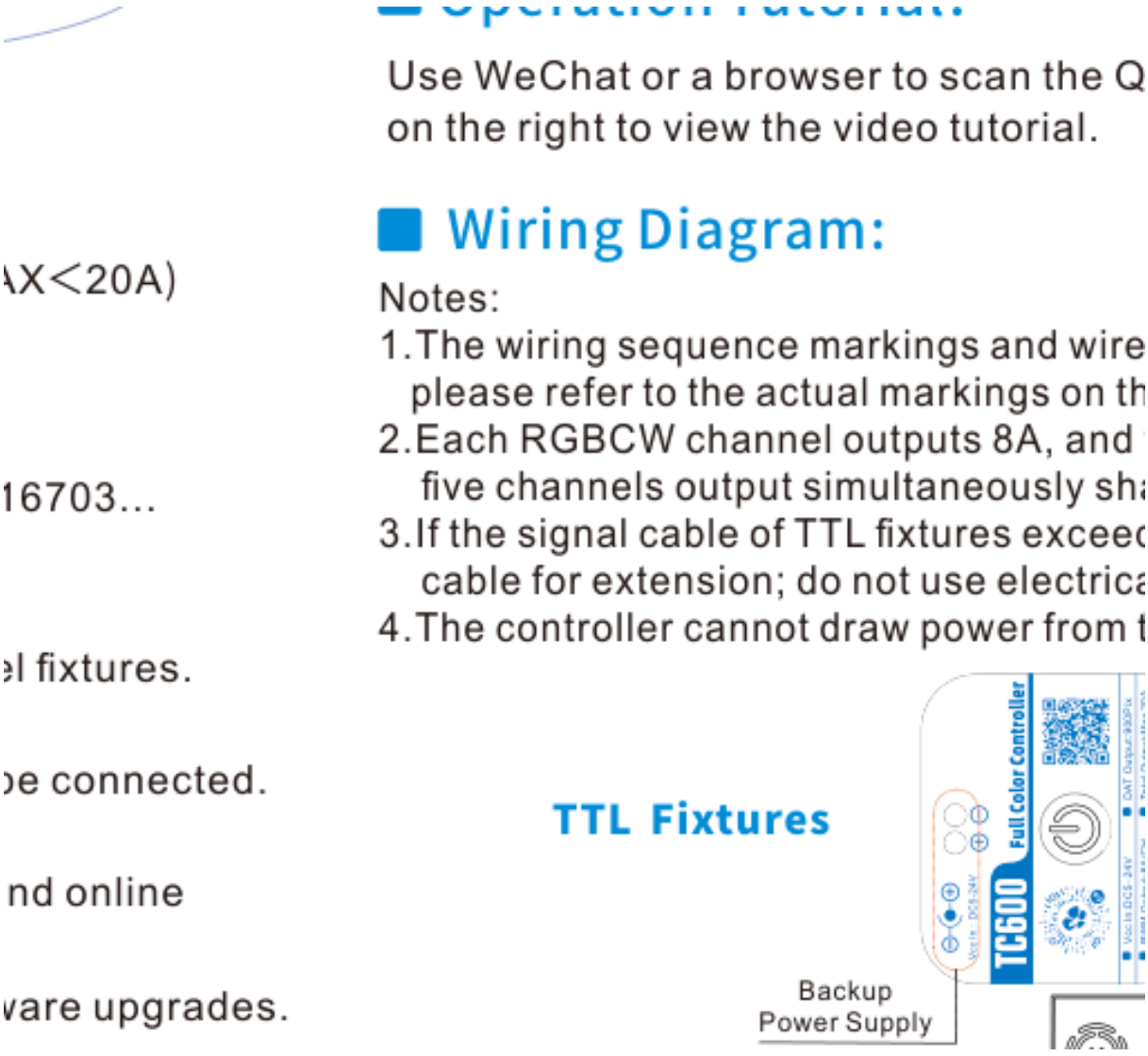
1. Tap the **+ Add Device** button in the app (top-right corner) to enter search mode.
2. Tap your controller in the scanned device list to add it.
3. Tick the device and tap **Control Device** to enter the control interface.

If the device cannot be found:

1. Check the controller is powered on and the indicator light is on.
2. Check phone Bluetooth is enabled.
3. Keep the phone close to the controller during search.
4. On first launch, allow all system permission requests.
5. For the WeChat mini program, enable Location and Bluetooth permissions (mini program top-right Edit → Settings → set to "While using the mini program").

Wiring Diagram

1. Follow the wire labels on your actual fixture.
2. Each RGBCW channel outputs 8 A; total current across all 5 channels must not exceed 20 A.
3. TTL signal wire over 2 m must use CAT5e network cable; do not use ordinary wire.
4. The controller cannot draw power from the fixture; use the auxiliary power supply port.



Wiring: TTL pixel fixture (top) and 5-color/RGBCW PWM fixture (bottom).