FlowLite

Specification Sheet
RF LED Controller

RGB+W Controller & Remote FL-CTL-RGBW

A five-channel RF controller with a touch color-wheel remote for RGB+CCT LED tape. It sits between a 12–24V DC constant-voltage power supply and the tape: R, G and B dim independently for millions of colors, WW and CW set the color temperature, and 10 dynamic modes and saved scenes are built in.

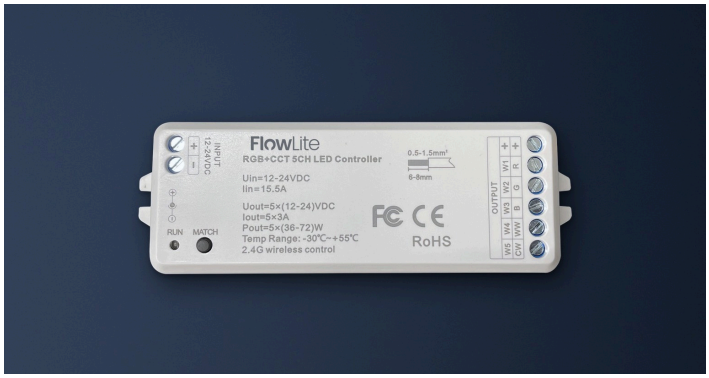
AT A GLANCE

Type	RF controller + remote, 5 channels (R, G, B, WW, CW)
Input	12–24V DC, constant voltage
Output	5 × 3 A (15 A max total), 180–360 W
Control	RF 2.4 GHz remote, up to 30 m
Effects	10 dynamic modes, 24 static colors, scenes
Location	Not waterproof: keep out of sun and rain
Remote	RF 2.4 GHz, CR2032 battery, 1-year standby
Wiring	0.5–1.5 mm² wire, 6–8 mm strip

ORDERING GUIDE

MODEL	TYPE	SERIES
FL-	**CTL** Controller **RMT** Remote	**RGBW** RGB+CCT

Example: **FL-CTL-RGBW** controller; the remote is FL-RMT-RGBW



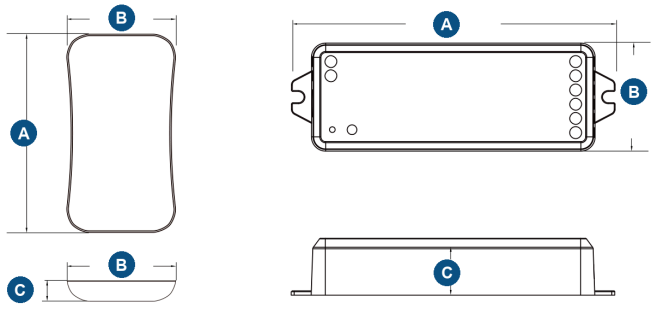
FEATURES

- Five PWM constant-voltage outputs: R, G, B, WW, CW
- Touch color wheel for RGB color or color temperature
- R, G and B dim independently for millions of colors
- Smooth, flicker-free dimming and switching
- 10 built-in dynamic modes, jump and gradual
- Auto-transmitting and auto-sync between controllers
- Works with a power repeater to extend the output

MODELS

MODEL	ITEM	POWER	OUTPUT / SIGNAL	NOTES
FL-CTL-RGBW	Controller (receiver)	12–24V DC in	5 × 3 A, 180–360 W total	15 A max total
FL-RMT-RGBW	Remote	3V DC (CR2032)	RF 2.4 GHz	30 m range, 1-year standby

DIMENSIONS



REMOTE CONTROLLER

ITEM	A	B	C
FL-CTL-RGBW	4.48 / 114	1.49 / 38	0.78 / 20
FL-RMT-RGBW	4.21 / 107	2.30 / 58.5	0.35 / 9

Inches / mm. A = length, B = width, C = height.

TECHNICAL SPECIFICATIONS

OUTPUT

Output type	PWM, constant voltage
Channels	5: R, G, B, WW, CW
Output voltage	5 × (12–24)V DC
Output current	3 A per channel, 15 A max total
Output power	180–360 W total (5 × 36–72 W)

INPUT

Input voltage	12–24V DC
Input current	15.5 A

CONTROL

Signal	RF 2.4 GHz
Remote distance	30 m
Auto-transmitting	Relays to the next controller within 15 m; control beyond 100 m
Synchronization	Automatic, same mode and speed
Dynamic modes	10
Static colors	24 (RGB key)
Scenes	Save and recall (Scene key)
Remote matching	Match key or power restart

REMOTE (FL-RMT-RGBW)

Output signal	RF 2.4 GHz
Working voltage	3V DC (CR2032 battery)
Standby time	1 year
Remote distance	30 m

ENVIRONMENT

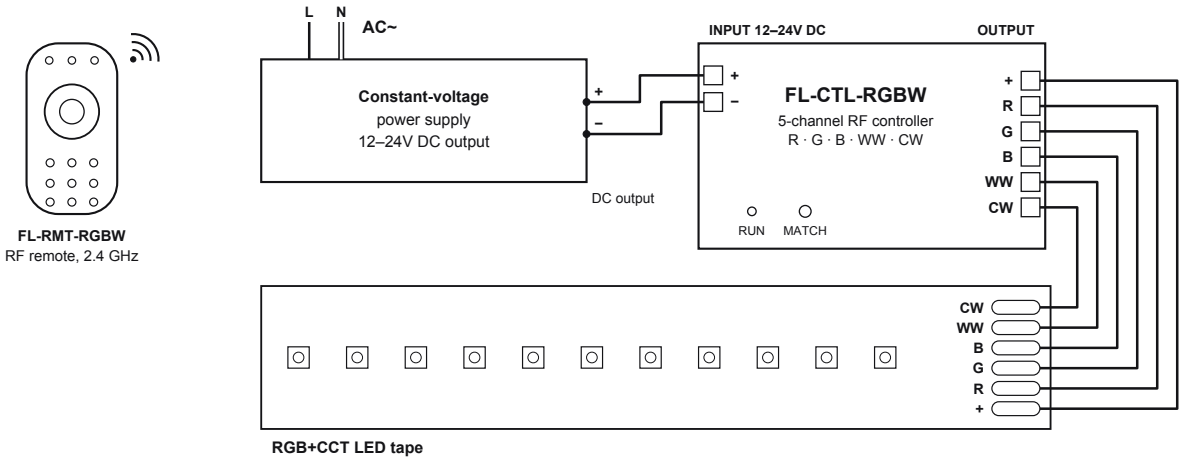
Operating temperature	-4°F to +131°F (-20°C to +55°C)
Location	Not waterproof; keep out of sun and rain

WIRING

Wire size	0.5–1.5 mm²
Strip length	6–8 mm

WIRING DIAGRAM

RGB+CCT tape with RF remote



• For reference only. Full steps are on the FL-CTL-RGBW installation sheet.