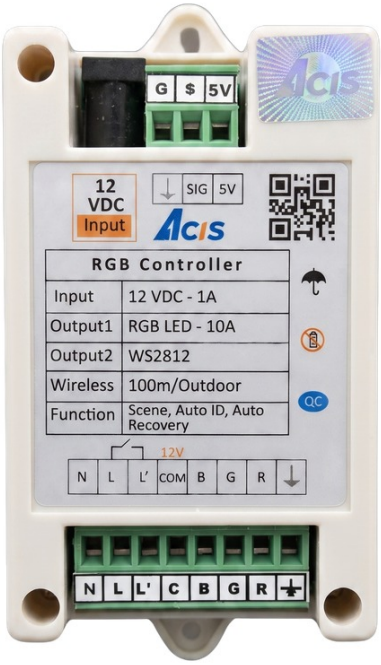
RAPTORTRON · USER MANUAL · INTEGRATED CONTROLLER

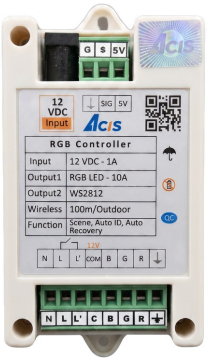
RGB

Installation, connection and safety instructions for the RGB colour-effect controller for architectural RGB/ARGB LED strips.



User manual · English edition

01 Product overview



RGB colour-effect controller.

Colour-effect controller for architectural RGB/ARGB LED strips.

ITEM	DETAIL
Model	RGB
Category	Integrated controller

02 Features

1. Architectural lighting controller, designed for colour mixing and smooth colour-transition effects on 12V RGB LED strips or 5V ARGB addressable RGB LEDs.
2. Built-in Raptortron Mesh technology, allowing the LED strip lighting to be linked directly to whole-home automation scenes.
3. Flexible adjustment of HEX colour codes, colour temperature, brightness and moving light effects through the Raptortron app.
4. Supports operating schedules, countdown effects or links to scenes triggered by environmental conditions.

03 Technical specifications

01 Design & installation

SPECIFICATION	VALUE
Housing colour	White
Housing material	Flame-retardant PC + ABS plastic
Dimensions	82mm x 50mm x 32mm

02 Interface & control modes

SPECIFICATION	VALUE
Output channel configuration	03 low-side PWM dimming channels, compatible with RGB/ARGB LED systems
Control interface	01 setup/reset button

03 Outputs & controlled load

SPECIFICATION	VALUE
Controlled load type	Multi-colour linear LED controller, compatible with common RGB/ARGB architectural light strips
Maximum rated output power	100W per channel
Dimming control protocol	Constant voltage RGB / DC dimming by PWM

04 Power & current

SPECIFICATION	VALUE
Input voltage	9-30V DC - 1A
Standby power consumption	< 1W

05 Connectivity & compatibility

SPECIFICATION	VALUE
Wireless communication	Raptortron Mesh
Wireless range	100m open air / 30m indoor

04 Installation guide

In the box

- Smart switch body
- Touch glass panel with bezel
- 2 wall screws
- Quick guide & warranty card

Installation steps

1. **Switch off the power.** Turn off the main circuit breaker for the area where the switch is installed. Use a voltage tester to confirm that there is no power at the switch location.
2. **Connect the wires.** Connect the L (Live) and N (Neutral) wires to the matching terminals on the switch body. For a switch that controls loads: connect the load wire (L-out) to the device. For a curtain switch: connect the 2 dry contacts (NO) to the Open/Close motor.
3. **Mount in the flush box.** Place the switch body in the 75×75mm flush box and tighten the 2 screws evenly; make sure the face sits flat against the wall.
4. **Fit the glass panel.** Align the touch glass panel with the body and press all 4 corners evenly until it clicks into place; fit the decorative bezel on the outside.
5. **Restore power.** Switch the circuit breaker back on. The indicator LED lights up and the device enters standby, waiting to be connected.

05 Connection guide

Preparation

- Raptortron smart switch
- 1 central hub with an Internet connection
- Raptortron app already connected to the central controller (make sure the phone and the central controller are on the same Internet network)

Download the Raptortron app for Android or iOS.

In the Raptortron app: auto learn

1. **Tap.** Open the Raptortron app, tap the "Menu" icon at the top of the screen, then select "Devices".
2. **Tap.** Tap the "Auto learn" icon.
3. **Tap.** When the "Auto learn" dialog appears, tick the "I have understood and agree" box, then tap **"OK"** to confirm.
4. The system starts a 60-second countdown to scan automatically and complete the device connection.

In the Raptortron app: manual learn

1. Open the "Menu" in the app, then go to "Devices".
2. **Press and hold.** Press and hold the icon of the device that you want to re-learn or replace.
3. In the list of options that appears, select "Manual learn".
4. **Tap.** When the "Manual learn" dialog appears, tap the "Learn" button. The dialog shows the Device code and the Serial number of the device.
5. The app counts down 60 seconds to finish synchronising and remembering the new device.

Teaching the device ID to the central controller

Do this on the device while the app is counting down.

1. **Press and hold.** Press and hold the button until you hear 2 beeps, then release it.
2. **Press.** Press **button 1** to teach the ID. Make sure the MCE is in ID-teaching mode.

Result

- **If successful:** the device exits automatically once the ID is taught.
- **If it fails:** you hear a long beep and the red light keeps blinking. To try again, press button 1 again, or press and hold the button until you hear a long beep to exit.

Important

- Auto learn fails if the number of devices exceeds the capacity limit of the central controller.
- In that case, see the Technical specifications of the central controller for the number of devices allowed, or switch to the manual learn method.

06 Safety notes

! Use only a power supply that matches the technical specifications in this document. Using the wrong power supply can damage the device and be dangerous.

! Do not open or repair the device while it is powered. All electrical wiring must be done by a qualified electrician.

! Keep the device in a dry place, away from direct water splashes (except models explicitly rated as water-resistant, IP xx).

! The product is covered by the official Raptortron warranty policy. Please keep your purchase invoice for the best support.

English edition translated in full from the manufacturer's original manual. Specifications are subject to change; current data: https://raptortron.com/product-rgb.html. Online version: https://raptortron.com/manuals/rgb/