AKER LIGHTING

TECHNICAL DATA SHEET

AL TC01-RGB

RGB TOUCH CONTROLLER



Pool Lighting › Controllers & Transformers

The AL TC01-RGB is a 3-channel RGB LED controller with an RF touch remote. It works on 12-24 VDC and supplies up to 12 A per channel (36 A max); output power is 216 W at 12 V and 432 W at 24 V. The touch colour ring selects colours, adjusts brightness and can hold a single static colour, and the remote works at up to 20 m. The output is common anode, and the controller operates between -30 °C and +60 °C.

PROTECTION RATING	OPERATING VOLTAGE	ELECTRICAL CLASS
IP20	12-24 VDC	Class III

WARRANTY
1-year warranty

OPERATING VOLTAGE 12-24 VDC

Important Supply only 12-24 VDC; never connect to 12-24 VAC or 220 VAC. Do not connect two wires directly (short circuit); connect the wires by colour as shown in the wiring diagram.

CERTIFICATES AND PROPERTIES

- Class III
- CE
- 1 year warranty
- IP20
- Suitable for direct mounting on normally flammable surfaces

FEATURES

Remote control

- RF touch remote with colour ring
- Remote range up to 20 m (RF signal)
- On/off switch on the remote
- Colour ring: touch to select a colour
- Colour changing and mode changing keys
- Brightness + / - keys, 256 brightness levels
- 21 programs: 7 static colours, jumpy and gradual colour changes, strobe flash and crossfade
- Adjustable speed in dynamic programs (100 levels)

Controller

- 12-24 VDC input, 3-channel output (R, G, B)
- 12 A per channel, 36 A max
- 3 open-drain (CMOS) outputs, common anode
- Screw terminals for input and output
- Power and receiver indicator LEDs
- Mounting flanges with screw slots

Package contents

- LED controller
- RF touch remote
- AAA batteries for the remote

TECHNICAL DATA

ELECTRICAL

Input Volt	12-24 VDC
Output Current	12 A x 3 CH 36 A max
Output Power	216 W (12 V) 432 W (24 V)
Output	3 Channel
Output Connection	Common anode
Control Signal	RF touch remote
Signal Range	20 m
Working Temperature	-30 °C ~ +60 °C

BODY AND MOUNTING

Controller Dimensions	82 × 80 × 32 mm
Protection	IP20, Class III
Warranty	1 year (excluding damage from misuse or overload)

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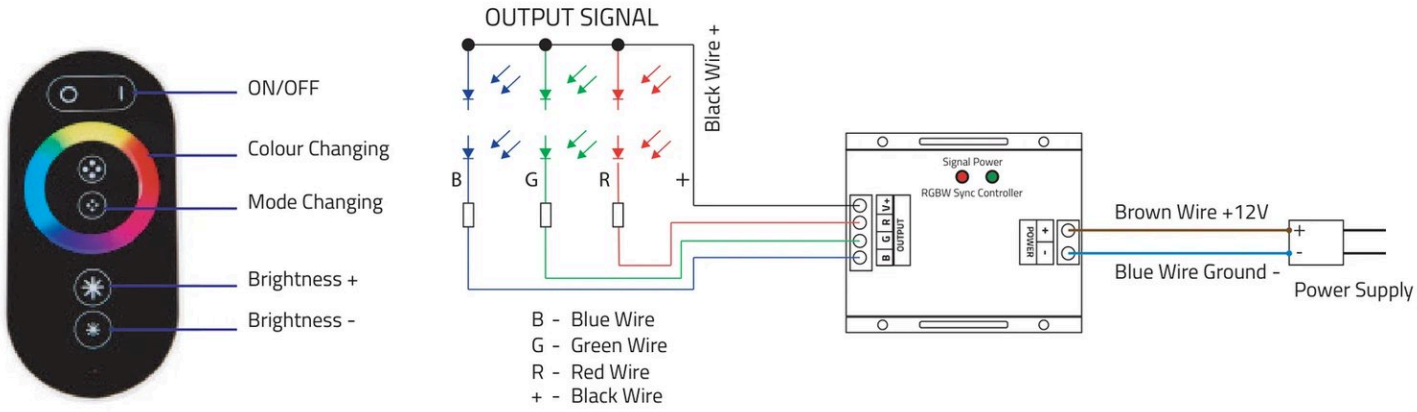
Terminal connections

Terminal	Function	Wire (diagram)
DC+ / DC-	Power input, 12-24 VDC	Brown (+12 V) / Blue (-)
V+	Common anode (+) of the LED strip	Black
R / CH1	Red channel	Red
G / CH2	Green channel	Green
B / CH3	Blue channel	Blue
POWER	Power indicator LED	
RECEIVER	Remote signal indicator LED	

Colour and mode programs

No	Program	Adjustable
1	Static red	Brightness
2	Static blue	Brightness
3	Static purple	Brightness
4	Static green	Brightness
5	Static yellow	Brightness
6	Static cyan	Brightness
7	Static white	Brightness
8	Three-colour jumpy change	Speed, brightness
9	Seven-colour jumpy change	Speed, brightness
10	Three-colour gradual change	Speed
11	Seven-colour gradual change	Speed
12	Red strobe flash	Speed, brightness
13	Blue strobe flash	Speed, brightness
14	Purple strobe flash	Speed, brightness
15	Green strobe flash	Speed, brightness
16	Yellow strobe flash	Speed, brightness
17	Cyan strobe flash	Speed, brightness
18	White strobe flash	Speed, brightness
19	R/B crossfade	Speed
20	B/G crossfade	Speed
21	G/R crossfade	Speed

WIRING DIAGRAM



Remote keys and wiring diagram

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