frogblue™

frogblue LED control module

frogStrip120e
STR120e.01

4-channel control module for LED strips

Intended use

4-channel control module for LED strips (RGBW, RGB, tunable white or unicolor) to connect an external 12-24 V DC constant power supply, max. 12 V / 5 A or 24 V / 5 A, with 2 contact inputs for potential-free buttons/switches and integrated time buffer. With comfort and timer functions.
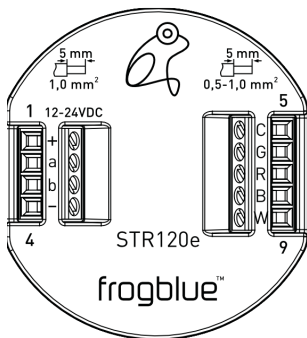
Safety information

Failure to observe the instructions may cause damage to the device and result in fire and other hazards!

Country-specific regulations must be observed.

These instructions are an integral part of the product and must remain with the end customer.

Device configuration

+: 12-24 V DC ext. power supply (5A)
a: Input 1
b: Input 2
-: GND

C: Common anode (+)
G: Load output 1 (standard: green)
R: Load output 2 (standard: red)
B: Load output 3 (standard: blue)
W: Load output 4 (standard: white)

Function

System information
This device is a product of the frogblue system. Detailed technical expertise obtained through frogblue training sessions is required.

The functionality of this device depends on the software. Detailed information regarding software versions and the respective range of functions can be found on the frogblue website.
Technical descriptions, further detailed instructions and information for proper disposal are available in the manual on the frogblue website at all times.
Commissioning and configuration are performed using the frogblue app.
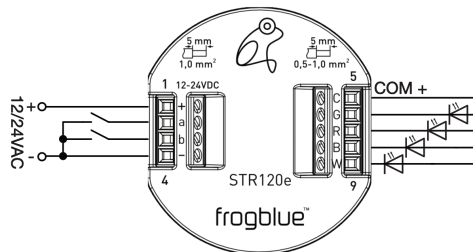
Product features:
- Short-circuit protection
- Temperature shutoff
- Programmable inputs and outputs
- Feedback of the switching state and the dimming value
- Programmable switching and dimming behaviour
- Supply via external power supply; no additional cabling required between frogblue modules
- Multi-Strip Technology
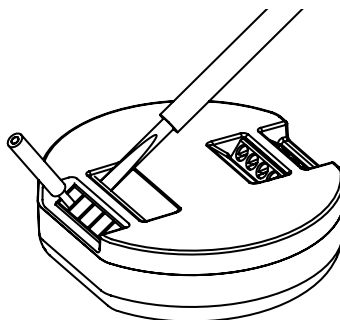- Strip-Power-Management

Information for qualified electricians

Installation and electrical connection

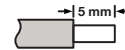### Connecting and installing the device

Connecting/disconnecting the wires

The supplied connection wires must be used to connect the power supply and inputs.

Stripping length

Power supply connection:
Ø 1 mm^2, rigid or flexible
(no wire end sleeve)
Max. cable length to power supply ≤ **20 cm**

For longer cables, the core cross-section must be adjusted accordingly.

Input connections:
Ø 0.5 mm^2 … 1 mm^2 rigid or flexible
(no wire end sleeve)
Max. cable length ≤ **50 m**

LED connections:
Ø 0.5 mm^2 … 1 mm^2, rigid or flexible
(no wire end sleeve)
Max. cable length to lamp ≤ **20 cm**

Factory default functions

Input		Output
a	press briefly	toggle on/off
a	press twice briefly	switch to white
a	press long	dimming
b	press briefly	switching colors
b	press long	fading colors

Technical data

Rated voltage	12-24 V DC @ 5 A
Current	max. total 5 A
Inputs	2; potential-free max. cable length ≤ **50 m**
Outputs	4; common anode max. cable length to lamp ≤ **20 cm**
Bluetooth	Bluetooth 4.2 Low Energy
Frequency range	2400–2483.5 MHz, max. 6.7 dBm
Ambient temperature	-25 to +50 °C
Storage/transport temperature	-25 to +70 °C
Dimensions (L x W x H)	48 x 53 x 21 mm
Connection type	Screw-type terminal
Conductor cross-section	0.5 mm - 1 mm^2

Technical changes reserved.

Warranty

The warranty is subject to the statutory provisions relating to the specialist retailer.

Declaration of Conformity

Hereby frogblue AG, Luxemburger Str. 6, 67657 Kaiserslautern, declares that this device is in compliance with the essential requirements and other relevant provisions of directive

2014/53/EU	Radio Equipment Directive
2011/65/EU	RoHS Directive

The declaration of conformity is available at www.frogblue.com