

E-flite EFLA600

E-flite EFLA600 Universal Light Kit Controller

Instruction Manual

INTRODUCTION

The E-flite EFLA600 Universal Light Kit Controller is designed to provide remote control functionality for LED lighting systems on remote-controlled aircraft. This controller enables users to activate and deactivate connected LED lights via an auxiliary channel on their RC receiver, enhancing visibility and realism for various RC models.

SAFETY PRECAUTIONS

- Always disconnect power from your RC system before making any electrical connections or disconnections to prevent damage to components or injury.
- Ensure that the input voltage to the controller does not exceed **5.5 volts**. Exceeding this voltage will damage the controller.
- Verify correct polarity when connecting LED lights to the controller outputs. Incorrect polarity can damage the LEDs or the controller.
- Keep the controller and all electrical components away from moisture and extreme temperatures.
- This product is intended for use with E-flite Universal Light Kit LEDs. Compatibility with other LED types is not guaranteed.

SETUP AND INSTALLATION

Follow these steps to properly install and connect your E-flite EFLA600 Universal Light Kit Controller:

1. **Connect to Receiver:** Plug the controller's servo lead (the three-wire connector) into an available auxiliary channel on your RC receiver. This channel will be used to control the ON/OFF function of the lights.
2. **Connect LED Lights:** Connect your E-flite Universal Light Kit LEDs to the white JST-style output ports on the controller. The controller supports up to 16 individual LEDs. Ensure each LED string is securely connected.
3. **Power Source:** The controller draws power directly from the receiver. Ensure your receiver's power supply (e.g., BEC from an ESC or a separate receiver battery) can provide sufficient current for the controller and all connected LEDs.



This image shows the E-flite EFLA600 Universal Light Kit Controller. It is a small, black rectangular unit with the E-flite logo and product information printed on it. Wires extend from both ends: one end has a standard servo connector for receiver input, and the other end has four white JST-style connectors for attaching LED light strings.

OPERATING INSTRUCTIONS

The E-flite EFLA600 controller operates by interpreting the pulse width signal from your receiver's auxiliary channel.

- **ON Function:** The LED lights will turn **ON** when the pulse width from the receiver channel is **greater than 1.5 milliseconds (> 1.5ms)**.
- **OFF Function:** The LED lights will turn **OFF** when the pulse width from the receiver channel is **less than 1.5 milliseconds** (. This typically corresponds to approximately the middle stick position on your transmitter for a two-position switch or a specific range for a proportional channel).

Average Current Load

The current draw depends on the number of connected LEDs:

- **6 LEDs:** Approximately 60mA @ 5.5 volts
- **12 LEDs:** Approximately 120mA @ 5.5 volts
- **16 LEDs:** Approximately 160mA @ 5.5 volts

Ensure your receiver's power source can adequately supply this current without voltage drops, especially when operating other servos or components.

MAINTENANCE

The E-flite EFLA600 Universal Light Kit Controller requires minimal maintenance to ensure long-term performance:

- **Cleaning:** Keep the controller free from dust, dirt, and debris. Use a soft, dry cloth to gently wipe the unit if necessary. Avoid using solvents or harsh chemicals.
- **Inspection:** Periodically inspect all wiring and connectors for signs of wear, damage, or corrosion. Ensure all connections are secure.
- **Storage:** When not in use, store the controller in a cool, dry environment, away from direct sunlight and extreme temperatures.

TROUBLESHOOTING

If you encounter issues with your E-flite EFLA600 controller, refer to the following troubleshooting guide:

Problem	Possible Cause	Solution
Lights do not turn ON/OFF	Incorrect receiver channel connection or assignment. Transmitter switch/stick position incorrect. Controller damaged.	Verify the servo lead is connected to an active auxiliary channel. Check transmitter settings for the assigned channel. Ensure the switch/stick moves past the 1.5ms threshold.
Lights flicker or are dim	Loose connections. Insufficient power from receiver. Damaged LEDs.	Check all LED and receiver connections for security. Ensure receiver power supply can handle the current load. Test LEDs individually if possible.
Controller not responding	Input voltage out of range. Controller damaged.	Verify input voltage is between 3V and 5.5V. If voltage is correct and connections are secure, the controller may be damaged and require replacement.
Only some LEDs light up	Faulty LED string. Loose connection to a specific LED port.	Check connections for the non-working LEDs. Test individual LED strings if possible to identify faulty units.

SPECIFICATIONS

Feature	Specification
Model Number	EFLA600
Input Voltage	3 – 5.5 Volts DC (Do not exceed 5.5V)
Max LED Capacity	Up to 16 E-flite Universal Light Kit LEDs
On/Off Control	Via RC receiver auxiliary channel
Activation Threshold	ON at > 1.5ms pulse width, OFF at < 1.5ms pulse width
Average Current Load (6 LEDs)	60mA @ 5.5V
Average Current Load (12 LEDs)	120mA @ 5.5V
Average Current Load (16 LEDs)	160mA @ 5.5V
Material Type	Plastic
Item Weight	0.02 Pounds (approximately 9 grams)
Item Dimensions	4 x 2.4 x 0.27 inches (approximately 10.16 x 6.1 x 0.69 cm)
Country of Origin	China

WARRANTY INFORMATION

For detailed warranty information regarding your E-flite EFLA600 Universal Light Kit Controller, please refer to the warranty documentation provided with your purchase or visit the official E-flite website. Warranty terms and conditions may vary by region and retailer.

SUPPORT

If you require further assistance or have questions not covered in this manual, please contact E-flite customer support or visit their official website for additional resources, FAQs, and contact information.

E-flite Official Website: www.e-fliterc.com