

# PRODUCT DESCRIPTION

## Backup Capacitor

The Backup Capacitor Flight Control System is an emergency backup power control device designed for Hobby Model, ensuring safe landing in the event of a main receiver power outage.



### Main Uses:

#### 01 Emergency Backup Power:

In case the aircraft receiver loses power during flight, the backup capacitor will automatically activate to power the receiver, ensuring control over the servos and enabling the aircraft to land safely.

#### 02 Dual Control Mechanisms:

**Switch Button Control:** Activate or deactivate the backup capacitor's power supply using a physical button.

**Throttle Signal Control:** Control is achieved through a 3PIN wire connected to the backup capacitor (orange signal wire). When the throttle frequency is within the range of 50Hz to 600Hz, a throttle signal value greater than 1500 indicates the system is in the "on" state; a value less than 1500 indicates the system is in the "off" state.

### Important Notes:

#### 01 Starting and Shutting Down with Throttle Signal Control:

**Starting:** When controlling with the throttle signal, ensure the throttle signal value is set above 1500 before starting the aircraft to activate the backup capacitor's power supply.

**Shutting Down:** When shutting down the aircraft, set the throttle value below 1500 to deactivate the backup capacitor's power supply.

#### 02 Backup Capacitor Charging State:

Pressing the switch button during the charging process of the backup capacitor is non-responsive and will not affect the charging state.

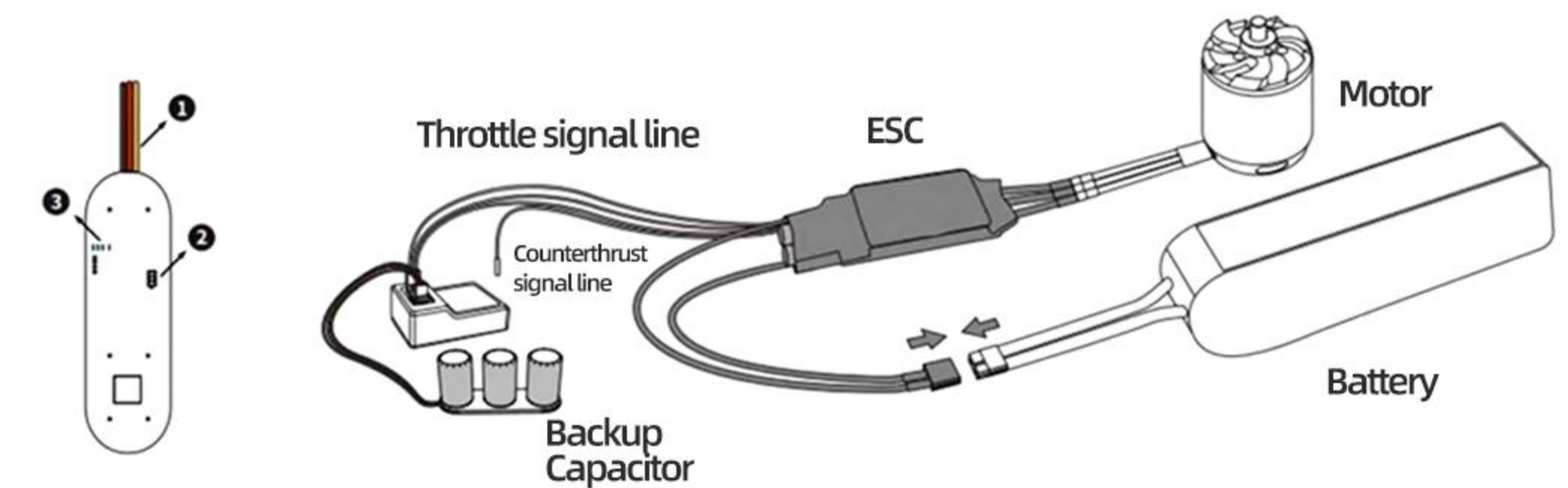
If you need to turn off the system after the backup capacitor is powered down, this can be achieved by pressing the switch button.

### Product Features Summary:

- Provides an emergency backup power source during aircraft flight.
- Dual control methods for increased flexibility and safety.
- Simple and versatile throttle signal control, compatible with a wide range of frequencies.
- Safety measures during the charging state of the backup capacitor.

The Backup Capacitor Flight Control System is an important safeguard for aircraft flight safety, offering pilots an additional safety measure to effectively intervene in critical moments, protecting the aircraft and the safety of its passengers.

### Connection diagram



- 1 Brown, red and orange wires:** The brown wire represents the earth wire, the red wire represents the positive wire, and the orange wire represents the signal wire, which is inserted into any other free channel of the receiver.
- 2 Switch**
- 3 LED indicator**

### LED indicator

- 01** After the backup capacitor is connected to the receiver, it starts to flash red light for self-test (about 3S), and starts to charge automatically after the self-test is completed.
- 02** Charging process, the three blue lights flashing in turn, until the three blue lights are always on behalf of the full charge.



# 航模后备电容说明书

航模后备电容是一款为航模设计的紧急备用电源控制装置，旨在确保飞机在主接收机断电的情况下能够安全降落。



## 主要用途：

### 01 紧急备用电源

当飞机在飞行过程中遇到接收机断电情况，后备电容会自动启动，为接收机供电，确保舵机得到控制，从而使飞机能够安全降落。

### 02 双重控制机制

**开关按键控制：**通过物理按键开启或关闭后备电容的供电。

**油门信号控制：**通过连接到后备电容的3PIN线（橙色信号线）来控制。当油门频率在50Hz至600Hz范围内，油门信号值大于1500时，系统处于开启状态；油门信号值小于1500时，系统处于关闭状态。

## 注意事项：

### 01 油门信号控制时的启动与关闭：

**启动：**在使用油门信号进行控制时，启动飞机前需确保油门信号值设置大于1500，以激活后备电容供电。

**关闭：**在关闭飞机时，将油门值设置到小于1500，以关闭后备电容的供电。

### 02 后备电容充电状态：

在后备电容充电过程中，按下开关键是无效的，不会影响充电状态。

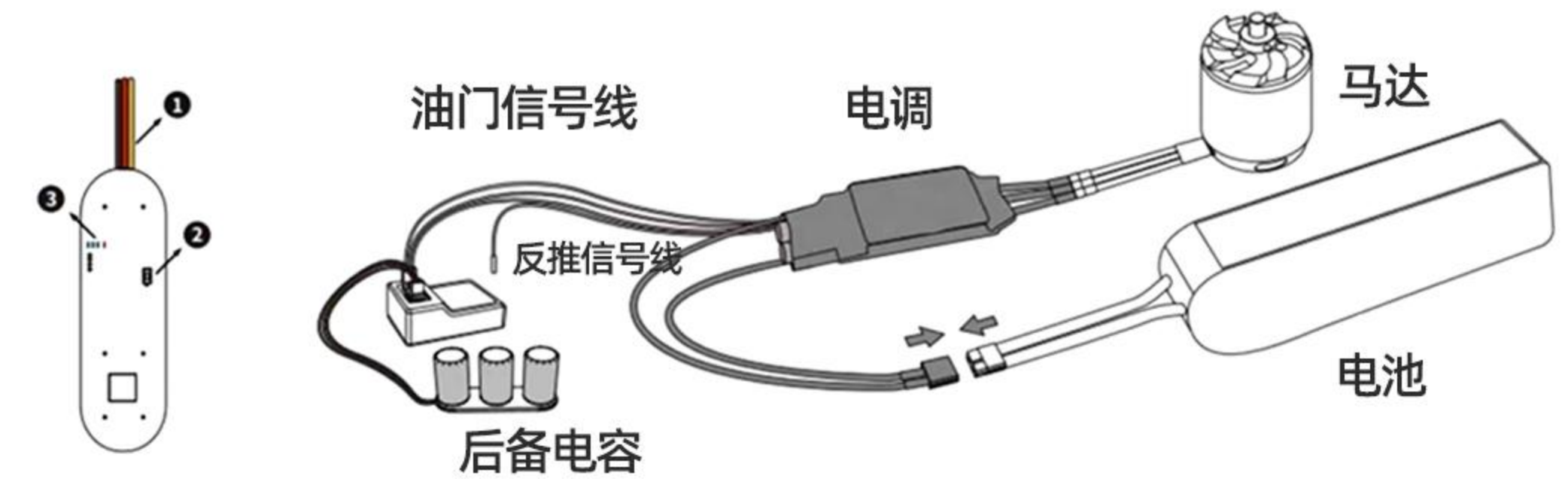
若需要在后备电容断电后关闭系统，可以通过按下开关键来实现。

## 产品特性总结：

- 提供飞机飞行过程中的紧急备用电源。
- 双重控制方式，增加了使用的灵活性和安全性。
- 简单易用的油门信号控制，适用于广泛的频率范围。
- 具备充电状态下的安全保护措施。

后备电容飞控系统是飞机飞行安全的重要保障，为飞行员提供了一个额外的安全措施，确保在关键时刻能够有效介入。

## 连接示意图



- 1 棕红橙线：棕色线代表地线，红色线代表正极线，橙色代表信号线，插入接收机其它任意空闲通道。
- 2 开关
- 3 LED指示灯

## LED指示灯

- 01 后备电容连接接收机后，此时开始闪红灯自检（大概3S），自检完成后开始自动充电。
- 02 充电过程中，三颗蓝灯依次闪烁，直至三颗蓝灯常亮代表充满电。

