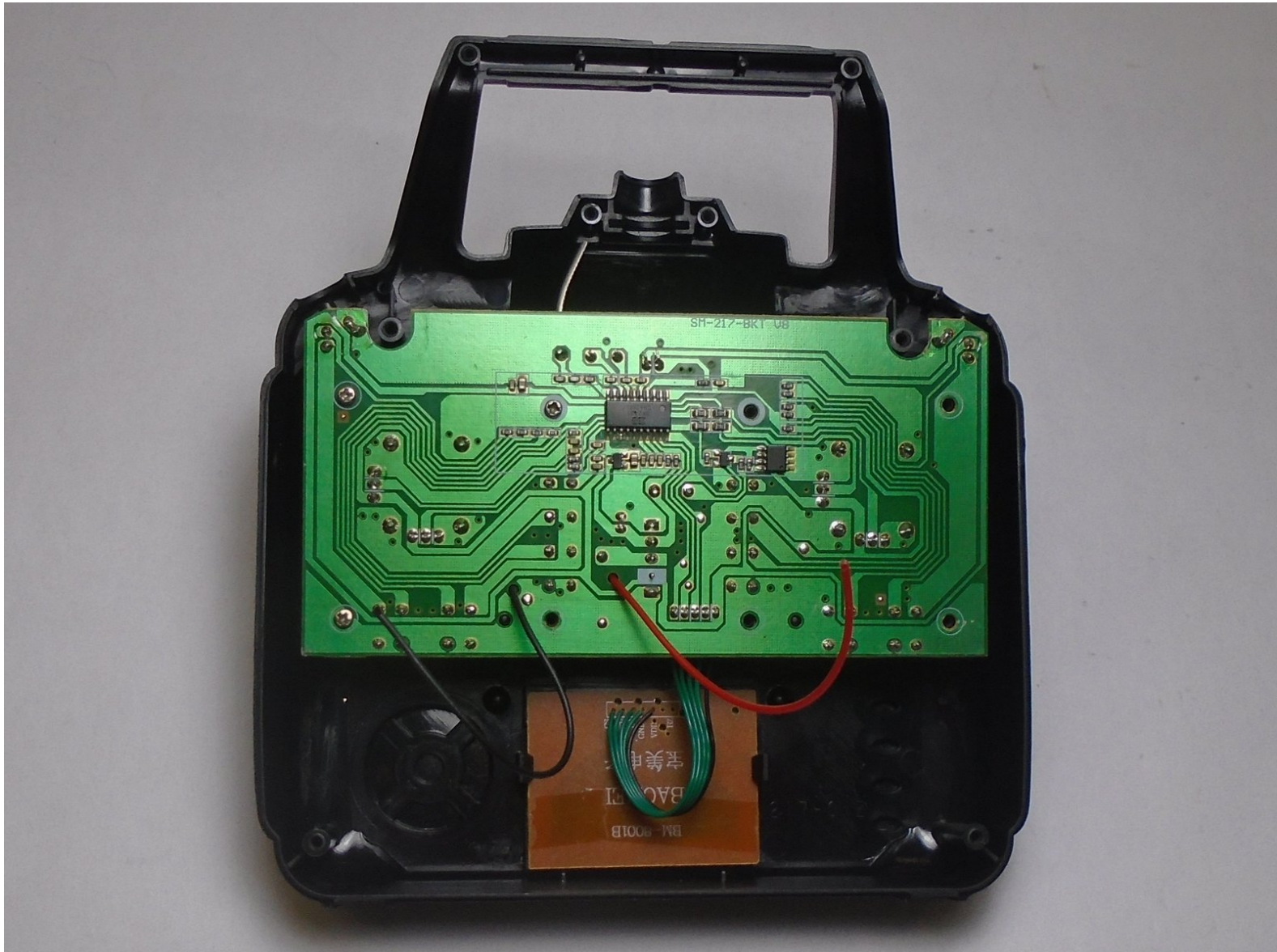# Protocol TerraCopter EVO Controller Motherboard Replacement

This guide shows the motherboard replacement for the Protocol TerraCopter EVO drone.

Written By: Jonathan Earls

# INTRODUCTION

The Terracopter EVO controller motherboard is used to control all of the functions of the controller and relay them to the drone.

## 🔧 TOOLS:

- Phillips #0 Screwdriver (1)
- Spudger (1)
- Soldering Iron (1)

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　　　　　　　　　www.iFixit.com

## Step 1 — Controller's battery



- Using a Phillips #0 screwdriver, remove the screw connecting the battery cover to the controller.

- Remove the battery cover from the controller.

## Step 2



- Remove all of four of the AA batteries from the controller.

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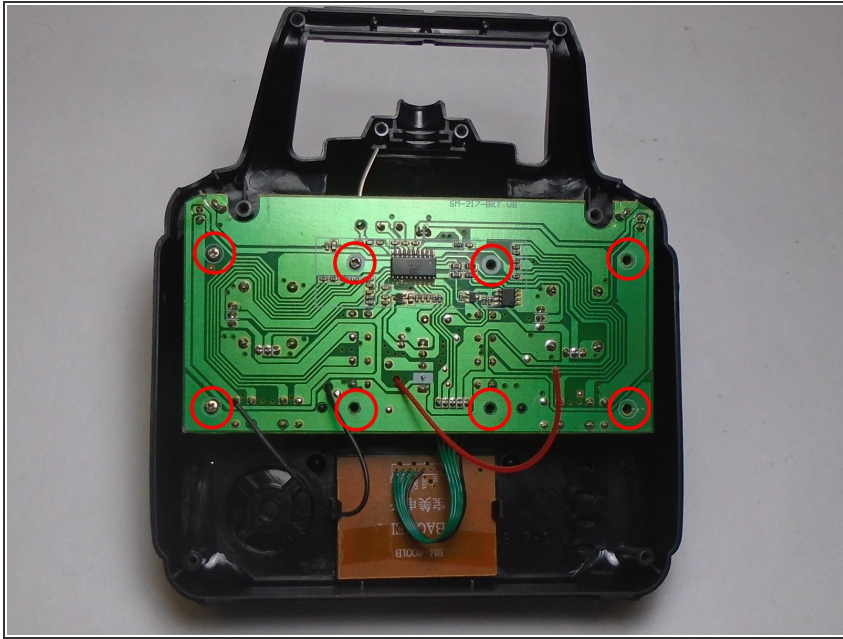## Step 3 — Protocol TerraCopter EVO Controller Opening



- ⓘ Note: the four Phillips screws on the rear panel are a millimeter longer than the two screws near the antenna and the two screws on the handle.

- Orientate the controller to where the battery compartment is facing upwards.

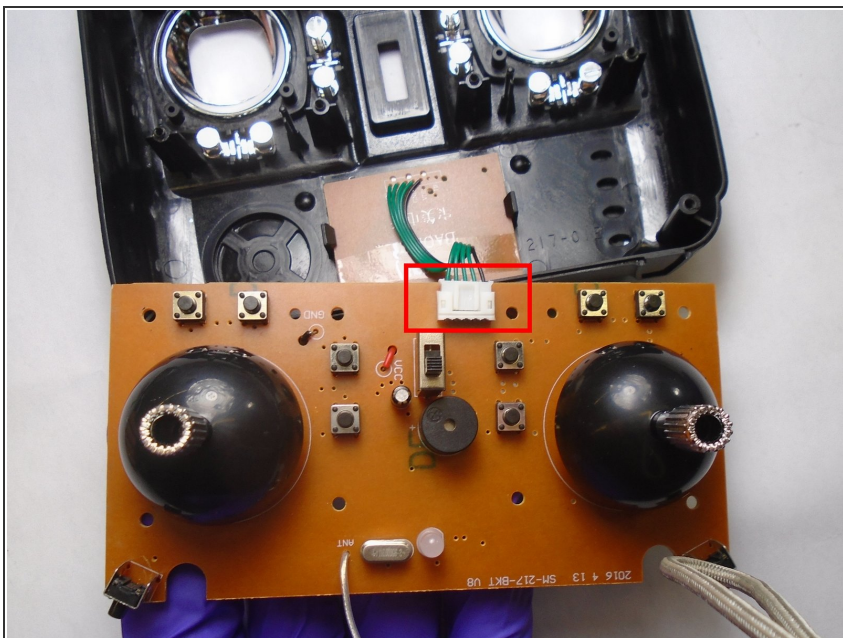- Remove the four 5mm and four 4mm Phillips #1 screws from the case.

## Step 4



- Since the battery wires are still attached, carefully move the rear panel down to expose the motherboard.

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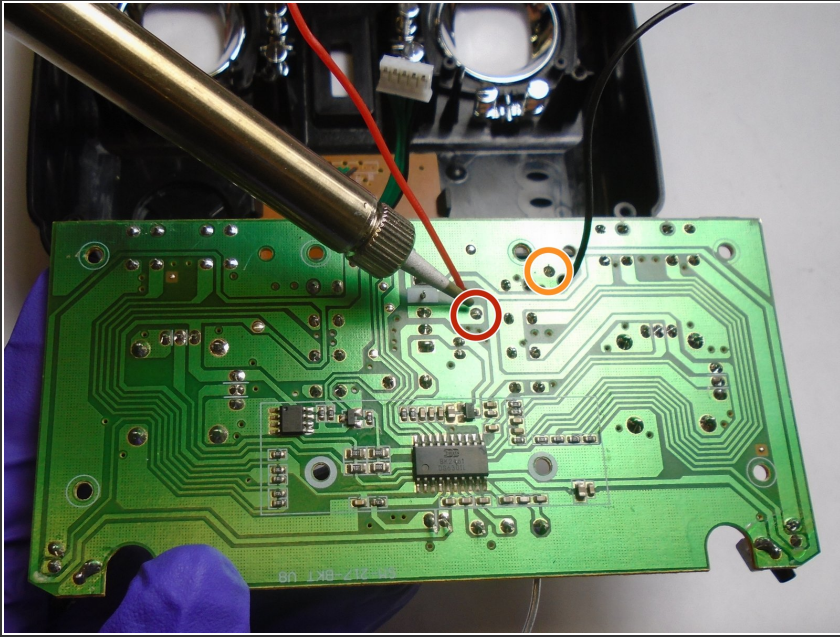
## Step 5 — Controller Motherboard



- Remove the eight 5mm Phillips #1 screws from the motherboard.

## Step 6



- Locate the set of four green wires and one black wire attached to the motherboard.

- Remove the male, white connector by pressing up on the two tabs on the female connector. Then, pull the connector away from the female connector on the motherboard

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## Step 7



- Locate the single pin holding the negative and positive wires to the motherboard. Each lead should have one pin holding each wire to the green side of the motherboard.

- Using a soldering iron, melt the existing solder point for the red lead (positive line).

- Using a soldering iron, melt the existing solder point for the black lead (negative line).

- Pull the red and black leads through their respective holes, out of the motherboard.

- (i) Check out our How to Solder and Desolder Connections guide if you are unfamiliar with soldering practices.

To reassemble your device, follow these instructions in reverse order.