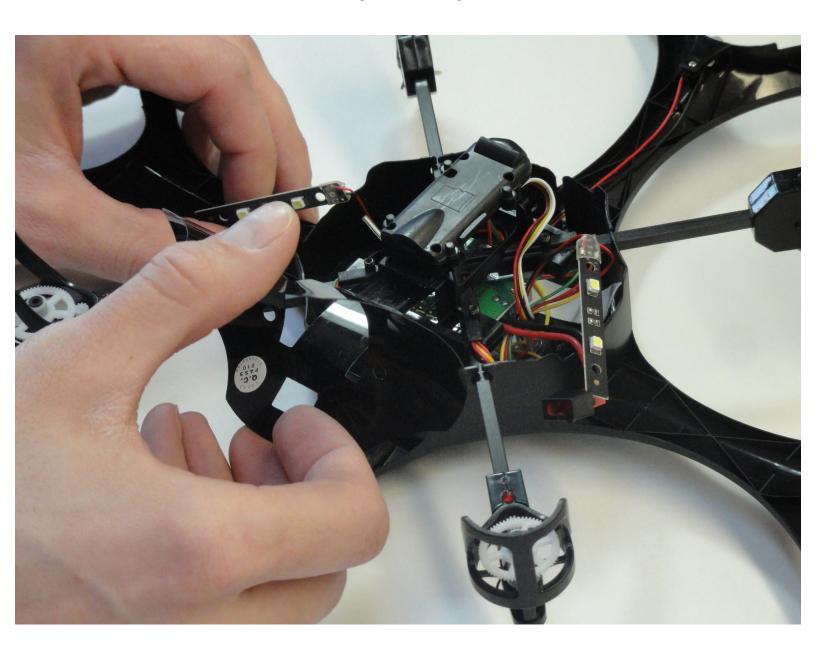


UDI U818A Camera Assembly Replacement

This guide will show you how to replace the video box (part number U818A-12), that is attached to the main frame of the drone.

Written By: Anthony Mitchell



INTRODUCTION

Replacing the camera assembly of the UDI U818A drone requires complete disassembly. The main frame is attached to the receiving board on the very inside of the drone. You will separate these two parts by unscrewing the screws in all four corners.

You should replace the camera of the drone if you notice a blurry image being received from the drone and have already troubleshoot connectivity issues, or if there is no image present at all.



TOOLS:

- iFixit Opening Tools (1)
- Phillips #000 Screwdriver (1)

Step 1 — Propellers





- Remove the 5 mm screws connecting each propeller to the rotating post using a Phillips #000 screwdriver.
- (i) As each screw is removed, safely pull the respective propeller from its apparatus.

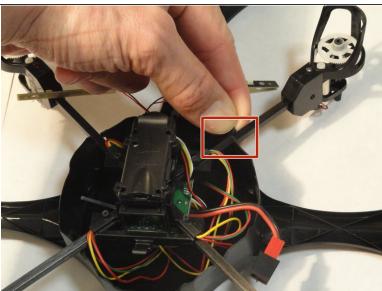
Step 2 — **Drone Cover**



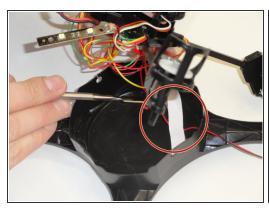


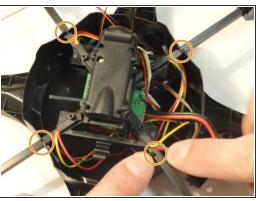
- Remove four 3 mm screws connecting the electronics to the frame using a Phillips #000 screwdriver.
- Pull the two LED bars through the dust cover and remove the thin plastic dust cover from the drone.
- As the piece connecting the electronics to the drone cover are accessible, keep note to not remove electronics until *after* disconnecting the drone head lamp first.





- Remove the single 5 mm screw from the head lamp using a Phillips #000 screwdriver.
- Remove the head lamp from the rest of the drone.
- Disconnect the electronics from the frame of the drone by pulling each arm out of the hole in the frame holding it in place.
- ⚠ Do not try to separate the frame from the electronics yet! Check to see if there is tape holding the head lamp wires in place underneath the electronics.

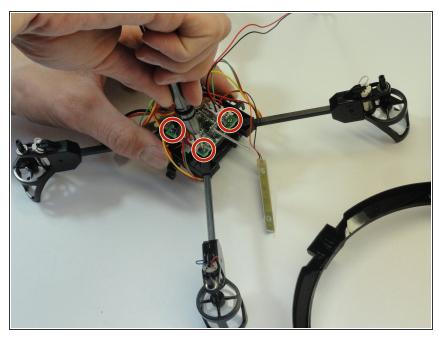




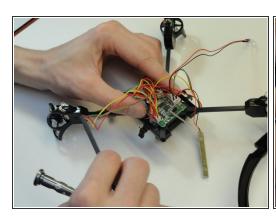


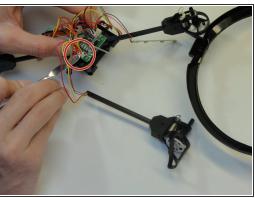
- If present, remove the white tape over the black and red wires on the head lamp with a spudger.
- ★ Keep the tape in reusable condition to re-secure the headlight later so there are no loose wires.
- Separate the plastic tabs securing the motor arms to the drone cover and delicately pull out the arm. Do this for all four arms to remove the frame from the cover.

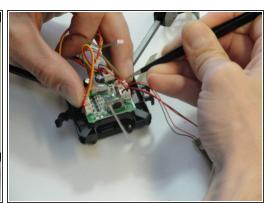
Step 5 — Drone Arms



- Remove four 5 mm corner screws that secure both the receiving board and the motor arm using a Phillips #000 screwdriver.
- When reassembling, notice how the wires tuck neatly in the bottom channel of the motor arm.





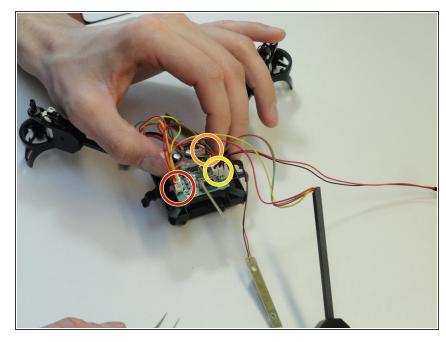


- Carefully slide the arm out from the socket.
- Use a nylon spudger to remove the connectors from the receiving board.
- (i) The cables connecting to the receiving board will be secured with a light adhesive that can be easily scraped away to remove the desired connector.



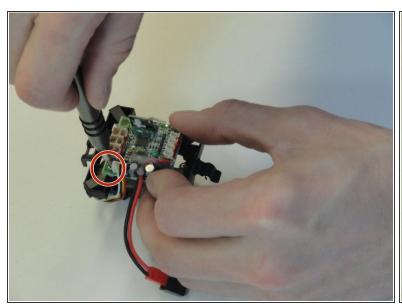


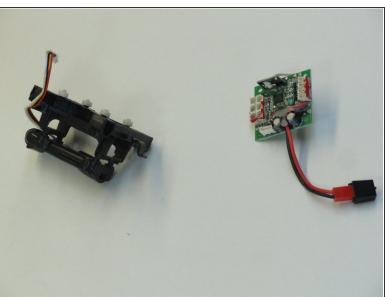
- Motor direction and propeller direction is crucial to proper flight. Refer to this format when reassembling.
- The <u>Front Left</u> motor identified by the Red/Blue wires is a **Standard**(*Clockwise*) spinning motor, it pairs with a *White* **A2** propeller.
- The <u>Front Right</u> motor identified by the Black/White wires is a **Reverse**(*CounterClockwise*) spinning motor, it pairs with a *White* **B2** propeller.
- The <u>Back Left</u> motor identified by the Black/White wires is a **Reverse**(CounterClockwise) spinning motor, it pairs with a *Black* **B1** propeller.
- The <u>Back Right</u> motor identified by the Red/Blue wires is a **Standard**(*Clockwise*) spinning motor, it pairs with a *Black* **A1** propeller.



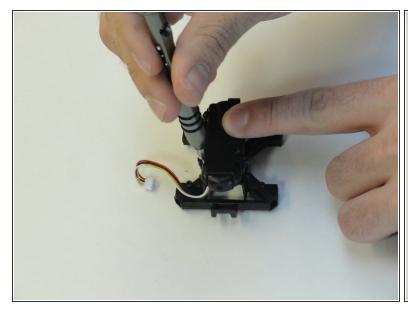
- The wiring can appear confusing, don't be alarmed. It's quite easy, and absolutely necessary for proper flight.
 - The 4 bottom connectors receive the motor power cables that are Red/Yellow wire pairs from each motor. Counting the sockets 1-4 from left to right.
 - Front Right motor connects to socket 1.
 - Front Left motor connects to socket 2.
 - Rear Left motor connects to socket 3.
 - Rear Right motor connects to socket 4.
- The Red/Green wire pairs from each motor power the LED to that branch, they connect to 4 of 6 sockets on the top of the receiving board. There is no sequence required.
- The headlight LED, and underside LED bars connect to the remaining 2 sockets on the top of the receiving board. Again, no sequence is required. All LED Red/Black and Red/Green wire pairs connect to top of the receiving board.

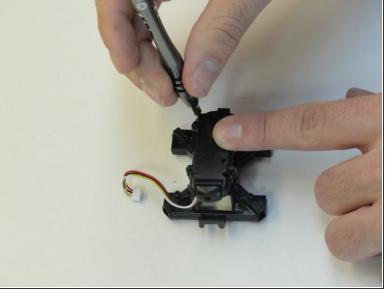
Step 9 — Camera Assembly





Use a spudger to unplug the camera cable from the processing chip.





- Take out all four of the 5mm screws from the main frame using a Phillips #000 screwdriver.
- Once all four screws are removed, carefully separate the main frame from the camera.

Reassemble the device by following these instructions in reverse order.